NEXUS OF IMPORTS IN INFLUENCING EXPORTS, DOMESTIC DEMAND AND SERVICES AMONGST ASEAN-5 COUNTRIES

By

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ABSTRACT

There has been growing concern that trade-dependent ASEAN-5 (Indonesia, Malaysia, Philippines, Singapore and Thailand) countries are losing their grip as trading nations due to the weaker contribution of net exports to Gross Domestic Product (GDP) with domestic demand contribution to GDP improving. This casts doubts on the Export-Led Growth Strategy (ELGS) with the growing perception that the Domestic Demand-Led Growth Strategy (DDLGS) is gaining prominence. The main aim of this study is to determine the connection between import and export components on private consumption, public consumption, gross fixed capital formation, exports, imports and services. Autoregressive Distributive Lag (ARDL) and Pedroni's Panel cointegration techniques were applied to the data covered from the year 1996 to 2015. The results explain that import components significantly influence domestic demand variables and exports. The results also support that the domestic demand contribution to GDP is being overestimated while net exports contribution to GDP is underestimated due to the impact of imported components. At the same time, the results unveil a significant and positive impact of imported components on services which indicate the overestimating services contribution to GDP. The results demonstrate a significant positive impact of export components on domestic demand and net exports. Finally, the estimates of export components reveal positive and significant impact on the services sector. The main policy implication that can be deduced is that both import and export components significantly influence domestic demand, net exports and services. These components benefit from the ASEAN-5 integration and from their respective country's policies. The authorities should design their policies by taking into consideration the impact of these components and regional integration to ensure they benefit in a more effective and efficient manner.

Keywords: ASEAN-5, ARDL, Pedroni's Panel cointegration, imports components, exports components.

ABSTRAK

Wujud kebimbangan di kalangan negara ASEAN-5 (Indonesia, Malaysia, Filipina, Singapura dan Thailand) yang bergantung kepada perdagangan akan kehilangan kedudukannya sebagai negara perdagangan disebabkan kekurangan sumbangan eksport bersih kepada Keluaran Dalam Negara Kasar (KDNK) berbanding sumbangan permintaan domestic kepada peningkatan KDNK. Hal ini menimbulkan kesangsian tentang peranan Strategi Exports Pimpinan Pertumbuhan (ELGS) terhadap pertumbuhan ekonomi negara serta meningkatkan tanggapan positif terhadap hubungan Strategi Permintaan Domestik Pimpinan Pertumbuhan (DDLG) dengan pertumbuhan ekonomi negara. Matlamat utama kajian ini adalah untuk menentukan hubungan antara komponen import dan eksport ke atas penggunaan swasta, penggunaan awam, pembentukan modal tetap kasar, eksport, import dan perkhidmatan. Kaedah Model Autoregresif Taburan Lat (ARDL) dan Teknik Kointegrasi Panel Pedroni telah diguna bagi tempoh data dari tahun 1996 hingga 2015. Hasil kajian menunjukkan dengan signifikasi komponen import mempengaruhi pemboleh ubah permintaan domestik dan eksport. Ianya menyokong bahawa sumbangan permintaan domestik kepada KDNK telah dinilai secara berlebihan, manakala sumbangan eksport bersih dinilai secara berkurangan. Keputusan juga memperlihatkan impak positif dan signifikan daripada komponen import ke atas perkhidmatan. Menunjukkan yang sumbangan perkhidmatan kepada KDNK telah dinilai secara berlebihan. Kesan komponen eksport ke atas pemboleh ubah permintaan domestik dan import, menunjuk impak positif yang signifikan daripada komponen eksport ke atas permintaan domestik dan eksport bersih. Kajian juga menunjukkan impak positif komponen eksport terhadap sektor perkhidmatan. Implikasi polisi yang disimpulkan ialah kedua-dua komponen import dan eksport mempunyai pengaruh yang ketara dalam permintaan domestik, eksport bersih dan perkhidmatan. Komponen ini mendapat manfaat daripada integrasi ASEAN-5 dan dari dasar negara masing-masing. Pihak berkuasa perlu merancang dasar mereka dengan mengambil kira kesan komponen dan integrasi serantau untuk memastikan mereka mendapat manfaat dengan cara yang lebih berkesan dan efisien.

Kata kunci: ASEAN-5, ARDL, Kointegrasi Panel Pedroni, komponen import, komponen eksport

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ADF	Augmented Dickey-Fuller
AFC	Asian Financial Crisis
ARDL	Autroregressive Distributive Lag
C	Consumption
DD	Domestic Demand
DDLGS	Domestic Demand-Led Growth Strategy
ECM	Error Correction Model
ECT	Error Correction Term
ELGS	Export-Led Growth Strategy
G	Government
GDP	Gross Domestic Product
GNP	Gross National Product
GFC	Global Financial Crisis
GFCF	Gross Fixed Capital Formation
GLES	Growth-Led Export Strategy
I	Investment
ILG	Import-Led Growth Strategy
IO	Input-Output
ISS	Import-Substitution Strategy
M	Imports

MCAP	Capital Imports
MCONS	Consumption Imports
NX	Net Exports
PP	Phillips-Perron
PUC	Public Consumption
PVC	Private Consumption
S	Services
SB	Structural Break
TB	Break-date
X	Exports
XCAP	Capital Exports
XINT	Intermediate Exports
XCONS	Consumption Exports
ZA	Zivot-Andrews

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter offers the overall outline of the thesis. The background of this thesis is outlined in section 1.2. In section 1.3, it deliberates the statement of the problem while the research questions are shown in section 1.4. Section 1.5 covers the objectives of this study. The significance is set in section 1.6 while sections 1.7 and 1.8 describe the scope of the study and the organization of the thesis.

1.2 Background of the Study

Export-led growth strategy (henceforth known as *ELGS*) gained eminence in the late 1970s, concentrating on developing the productive capacity of the country via penetrating into overseas markets by taking advantage of the benefits of the openness of the economy. This strategy replaced import-substitution strategy (hereafter identified as *ISS*) which played a vital role in developing and driving gross domestic product (henceforth known as *GDP*) especially post World War II for about three decades. Although the *ELGS* grew dominance, scholars outlined three different perceptions in relation to this strategy. The first group emphasis is on 'Hecksher-Ohlin-Samuelson' theory of comparative advantage. This theory basically highlights on the gains from global trade between countries with different capital-labour ratios (Ohlin 1933; Samuelson 1948; Dornbusch 1980).

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REFERENCES

Abhayaratatne, A.S.P. (1996). Foreign Trade and Economic Growth: Evidence from Sri Lanka, 1960-1992. *Applied Economic Letters* ,vol. 3, pp. 567-570.

Afaf Abdull J.Saeed and Majeed Ali Hussain. (2015). Impact of Exports and Imports on Economic Growth: Evidence from Tunisia. *Journal of Emerging Trends in Economics and Management Science* (JETMS), 6(1):13-31.

Afxentiou, P., & Serletis, A. (2000). Output growth and variability of export and import growth: international evidence from granger causality tests. *The Developing Economies*, 38(2), 141-163.

Afzal, M. (2001). Import Functions for Pakistan–A Simultaneous Equation Approach. *The Lahore Journal*, 6(2), 109.

Aghion, P. and Howitt, P. (1992). A Model of Growth through Creative Destruction. *Econometrica,* 60:323-351.

Ahmad, J. and A. C. C. Kwan. (1991). Causality between Exports and Economic Growth. *Economics Letters,* vol. 37, pp. 243-248.

Ahmed, H. A., & Uddin, M. G. S. (2009). *Export, imports, remittance and growth in Bangladesh: An empirical analysis*. Trade and Development review, 2(2).

Ahmed, J. and Harnhirun. S. (1996). Cointegration and Causality between Exports and Economic Growth: Evidence from the ASEAN Countries. *Canadian Journal of Economics,* vol. 24, Special Issue (April), pp. 413-416.

Ahmed, Qazi Masood, Mohammad Sabihuddin Butt and Shaista Alam. (2001). *Economic Growth, Export and External Debt Causality: The Case of Asian Countries*. A paper presented at the 16th Annual General Meeting of the Pakistan Society of Development Economists, January 22-24, 2001. Islamabad.

Ahmet,U. (2008). Import and Economic Growth in Turkey: Evidence from Multivariate VAR Analysis. *Journal of Economics and Business,* vol.XI -2008, No.1 & No 2.

Akinlo, A. E., & Akinlo, O. O. (2009). Stock market development and economic growth: Evidence from seven sub-Sahara African countries. *Journal of Economics and Business*, 61 (2), 162-171.

Alders, J. A. J. (1988). De bijdrage van de bestedingscategorieën aan de groei. *Economisch Statistische Berichten*, pp. 816-821.

Al-Yousif, Yousif. K. (1997). Exports and Economic Growth: Some Empirical Evidence from the Arab Gulf Countries. *Applied Economics* (June), pp. 693-697.

Ali, S. (2013). *Cointegration Analysis of Exports and Imports*: The Case of Pakistan Economy. MPRA Paper No. 49295.

Alias, E., A. Baharom, A. Radam and I. AIsmail. (2009). Trade sustainability in the forestry domain: The case of Malaysia. *Asian Social Science*, 5(12): 78-83.

Al-Khulaifi, A.S. (2013). Exports and Imports in Qatar: Evidence from Cointegration and Error Correction Model. *Asian Economic and Financial Review*, 3(9):1122-1133.

Amsden, A. (1989). *Asia's Next Giant: South Korea and Late Industrialisation*. Oxford University Press, New York.

Anorou, E., & Ahmad, Y. (2000). Openness and Economic Growth: Evidence from selected ASEAN countries. *Indian Economic Journal*, 47(3), 110.

Anwar, Muhammad S. and R. K. Sampath. (2000). Exports and Economic Growth. *Indian Economic Journal*. January – March 1999-2000 vol. 47, No.3, pp. 79-88.

Arize, A.C. (2002). Imports and Exports in 50 Countries: Tests of Cointegration and Structural Breaks. *International Review of Economics and Finance*, vol. 11, pp. 101-115.

Asafu-Adjaye, J. and Chakraborty, D. (1999). Export Growth and Import Compression: Further Time Series Evidence from LDCs. *Australian Economic Papers* 38:164-175.

Ashraf, M., Rehman, S., Ghazali, A., Raza, A., & Asad, A. (2011). Analyzing the causal relationship between imports and economic growth for Pakistan. Interdisciplinary *Journal of Contemporary Research In Business*, 3(2), 1716.

Awokuse, T. O. (2008). Trade openness and economic growth: is growth export-led or import-led? *Applied Economics*, 40(2), 161-173.

Awokuse, T.O. (2007). Causality between Exports, Imports and Economic Growth: Evidence from Transition Economies. *Economics Letters,* 94:389-95.

Aydın, F., Çıplak, U. and Yücel, M.E. (2004). *Export Supply and Import Demand Models for the Turkısh Economy*. Central Bank of the Republic of Turkey.

Aziz, N., & Horsewood, N. J. (2008). *Determinants of Aggregate Import Demand of Bangladesh: Cointegration and Error Correction Modelling*. In International Trade and Finance Association Conference Papers (p. 1).

Bacha, E. (1990). A Three-Gap Model of Foreign Transfers and the GDP Growth Rate in Developing Countries. *Journal of Development Economics,* 32(2), 279-96.

Bader, S., & Riazuddin, R. (2006). *Determining import intensity of exports for Pakistan*. State Bank of Pakistan.

Baharumshah, A.Z., and Rashid, S. (1999). Exports, Imports and Economic Growth in Malaysia: Empirical Evidence Based on Multivariate Time Series. *Asian Economic Journal,* 13(4): 389-406.

Bahmani-Oskooee, M., & Ratha, A. (2004). The J-curve: a literature review. *Applied Economics*, 36(13), 1377-1398.

Bahmani-Oskooee, M., & Kara, O. (2003). Relative responsiveness of trade flows to a change in prices and exchange rate. *International Review of Applied Economics*, 17(3), 293-308.

Bahmani-Oskooee, M. and F. Niroomand. (1998). Long-Run Price Elasticities and the Marshall-Lerner Condition Revisited. *Economics Letters*, 61(1), 101-109.

Bahmani-Oskooee, M. and J. Alse. (1993).Export Growth and Economic Growth: An Application of Cointegration and Error-Correction Modelling. *Journal of Developing Areas* vol. 27, No. 4 (July), pp. 535-542.

Bahmani-Oskooee, M. & G. Shabsigh. (1991). Exports, Growth and Causality in LDCs: A Re-examination. *Journal of Development Economics* vol. 36, No. 2, pp. 405-415.

Bai, J., & Perron, P. (2003). Computation and analysis of multiple structural change models. *Journal of Applied Econometrics*, 18(1), 1-22.

Balassa, B. (1991). *Economic policies in the Pacific area developing countries*. New York University Press.

Balassa, B. (1985). Exports Policy Choices, and Economic Growth in Developing Countries after the 1973 Oil Shocks. *Journal of Development Economics*, vol. 18: 23-35.

Balassa, B. (1980). The Process of Industrial Development and Alternative Development Strategies. *Essays in International Finance*. Princeton University, New Jersey, No.141.

Balassa, B. (1978). Exports and Economic Growth: Further Evidence. *Journal of Development Economics* vol.5, pp181-189.

Balassa, B, & Associates. (1971). *The structure of protection in developing countries*. The John Hopkins University Press, Baltimore.

Baltagi, B. H., & Griffin, J. M. (1983). Gasoline demand in the OECD: An application of pooling and testing procedures. *European Economic Review*, 22(2), 117-137.

Baltagi, B. H., J. M. Griffin and W. Xiong (2000). To Pool or Not to Pool: Homogeneous Versus Heterogeneous Estimators Applied to Cigarette Demand. *Review of Economics and Statistics* 82, 117-126.

Barro, Robert J. & Xavier Sala-i-Martin. (1997). Technological Diffusion, Convergence, and Growth. *Journal of Economic Growth*, pp. 1–26.

Barro, R. & Sala-i-Martin, X. (1995). *Economic Growth*, McGraw-Hill, Inc.

Barro, R. J., & Lee, J. W. (1994). *Sources of economic growth*. In Carnegie-Rochester conference series on public policy (vol. 40, pp. 1-46). North-Holland.

Barro, R. J., & Sala-i-Martin, X. (1992). Convergence. *Journal of Political Economy*, 223-251.

Barro, R.J. (1991). Economic Growth in a Cross-Section of Countries. *Quarterly Journal of Economics*, 106(2): 407-443.

Bassanini, A., & Scarpetta, S. (2001). *Does human capital matter for growth in OECD countries? Evidence from pooled mean-group estimates*. Retrived from https://www.researchgate.net/publication/222917759

Bathalomew D. (2010). An econometric estimation of the aggregate import demand function for Sierra Leone. *Journal of Monetary and Economic Integration*, 10(1), 5–24.

Baum, C. F. (2004). A review of Stata 8.1 and its time series capabilities. *International Journal of Forecasting* 20 (1), pp: 151-161.

Becker, U. (2001). A Dutch Model: Employment Growth by Corporatist Consensus and Wage Restraint? A Critical Account of an Idyllic View. *New Political Economy*, 6(1), 19-43.

Begum, Shamshad and Abdul F. M. Shamsuddin. (1998). Exports and Economic Growth in Bangladesh. *The Journal of Development Studies* vol. 35, No. 1, October 1998, pp. 89-114.

Ben-David, D., & Loewy, M. B. (1996). Free trade and long-run growth (No. 32-96). *Journal of Economic Growth*, 3, 143-170 (July (1998).

Bhagwati, J.N. (1990). Departures from Multilateralism Regionalism and Aggressive Unilateralism. *The Economic Journal,* vol 100, No. 403, pp 1304-1317.

Bhagwati, J.N. (1988). Export-Promoting Trade Strategy: Issues and Evidence. *The World Bank Research Observer,* vol. 3, No.1, pp. 27-57.

Bhagwati, J.N. (1978). Foreign Trade Regimes and Economic Development; Anatomy and Consequences of Exchange Control Regimes. *National Bureau of Economic Research*, New York.

Bhagwati, J.N. (1958). Immiserizing Growth: A Geometrical Note. *The Review of Economic Studies* vol. 25, No. 3, pp. 201-205

Bhat, Sham K. (1995). Export and Economic Growth in India. *Artha Vijana*, (December) Vol. 37, No. 4, pp. 350-358.

Blecker, R.A. and Razmi, A. (2010). Export-Led Growth, Real Exchange Rates and the Fallacy of Composition. *Handbook of Alternative Theories of Economic Growth*. Edward Elgar Publishing.

Blecker, R. (2002). The Balance of Payments-constrained Growth Model and the Limits to Export-Led Growth. *In P. Davidson, ed., A Post Keynesian Perspective on Twenty-First Century Economic Problems*, Northampton, Mass: Edward Elgar, pp69-88.

Blecker, R.A. (2000). *The Diminishing Returns to Export-led Growth*. Prepared for the Council of Foreign Relations Working Group on Development, New York.

Blomstrom,M.,Lipsey,R.E. and Zejan,M (1993). Is Fixed Investment the Key To Economic Growth. *National Bureau of Economic Research*.

Boltho, Andrea. (1996). *Was Japanese Growth Export Led?* Oxford Economic Papers vol. 48. No. 3, pp. 415-432.

Bowen, H. P.; A. Hollander and J-M. Viane (1998). *Applied International Trade Analysis.* London: Macmillan Press.

Bowen, H. P.; E. E. Leamer and L. Sveiskas (1987). A Multi-country Multi-Factor Test of the Factor Abundance Theory. *American Economic Review* 77: 791–809.

Brander, J. A. and Spencer, B. J. (1985). Export Subsidies and International Market Share Rivalry. *Journal of International Economics*, vol. 18, pp. 83–100.

Brecher; Choudri (1982). The Leontief Paradox: Continued. *Journal of Political Economy* 90 (4): 820–823.

Brewer, A. (1985). Trade with Fixed Real Wages and Mobile Capital. *Journal of International Economics* vol. 18 No 1-2, pp.177-186.

Bronfenbrenner, K. (2000). *Uneasy Terrain: The Impact of Capital Mobility on Workers, Wages, and Union Organizing*. Report to the US Trade Deficit Review Commission. Washington DC, US Congress.

Bronfenbrenner, K. (1997). We'll Close! Plant Closings, Plant-Closing Threats, Union Organizing and NAFTA. *Multinational Monitor*, 18(3), 8-14.

Bruton, H. (1989). Import Substitution. *Handbook of Development Economics,* vol. 2, pp.1601-1644.

Buffie, E. F. (1992). On the condition for export-led growth. *Canadian Journal of Economics*, 211-225.

Cameron & Cross. (1999).The importance of exports to GDP and jobs. *Canadian Economic Observer*, November, Statistics Canada, no. 11-010-XPB.

Caporale, G.M and Chui, M. (1999). Estimating income and price elasticities of trade in a cointegration framework. *Review of International Economics*, 7, 254-264.

Carbajal, E., Canfield, C., & De la Cruz, J. L. (2009). *Economic Growth, Foreign Direct Investment and International Trade: Evidence on Causality in the Mexican Economy*. In annual meeting of the BALAS Annual Conference, Universidad de los Andes School of Management, Bogota, DC, Colombia (pp. 05-23).

Caves, R. E. (1970). *Export-led growth: the post-war industrial setting. Induction Growth and Trade*: Essays in Honour of Sir Roy Harrod.

Central Commossion Statistics. (2006). De Nederlandse Economie 2005, *Statistics Netherlands*, Voorburg/Heerlen, the Netherlands.

Çetintaş, H., & Barişik, S. (2009). Export, import and economic growth: The case of transition economies. *Transition Studies Review*, 15(4), 636-649.

Chang, Tsangyao; Simo-Kengne, Beatrice D.; Gupta, Rangan. (2014). The Causal Relationship between Imports and Economic Growth in the Nine Provinces of South Africa: Evidence from Panel Granger Causality Tests, *Journal of Economic Cooperation & Development.*

Chang, T., Ho, Y., & Huang, C. (2005). A reexamination of South Korea's aggregate import demand function: The bounds test analysis. *Journal of Economic Development*, 30(1), 119.

Chang, H.J. (2002). *Kicking Away the Ladder: Development Strategy in Historical Perspective.* Anthem Press.

Chani M.A., Chaudhary A.R. (2012). The role of expenditure components in determination of import demand: Empirical evidence from Pakistan. *Pakistan Journal of Commerce and Social Sciences*, 6(1), 35–52.

Charles, A & Morrissey, O. (2007). Trade liberalisation is good for you if you are rich. *CREDIT Research Paper*, No. 07/01.

Chen, H. (2009). A literature review on the relationship between foreign trade and economic growth. *International Journal of Economics and Finance*, 1(1), 127.

Chenery, H.B. (1969). The Two Gap Approach to Aid and Development. *American Economic Review,* 59(3), 446-9.

Chenery, H.B. and Strout, A.M. (1966). Foreign Assistance and Economic Development. *American Economic Review,* vol. 56, No. 4, Part 1, pp. 679-733.

Cheong, T.T. (2005). Are Malaysian Exports and Imports Cointegrated? A Comment. *Sunway Academic Journal* 2, 101–107.

Chimobi, O. P. (2010). The causal relationship among financial development, trade openness and economic growth in Nigeria. *International Journal of Economics and Finance*, 2(2), p137.

Chow, P. (1987).Causality between Export Growth and Industrial Development: Empirical Evidence from the NICs. *Journal of Development Economics*, vol.26, pp. 55-63.

Christiano, L. J. (1992). Searching for a Break in GNP. *Journal of Business & Economic Statistics*, 10(3), 237-250.

Coe, D.T. and Helpman, E. and Hoffmaister, A. (1997). North-South Spillovers. *Economic Journal* 107: 134-149.

Coe, D.T. and Helpman, E. (1995). International R&D Spillovers. *European Economic Reviews*. vol. 39, No. 5, pp859-887.

Coe, D.T. and Helpman, E. (1993). International R&D Spillovers, *National Bureau Economic Research.*

Constant N.B.Z.S., Yue Y. (2010). An econometric estimation of import demand function for Cote D'Ivoire. *International Journal of Business and Management*, 5(2), 77–84

Connolly, M. (1998). *The Dual Nature of Trade: Measuring Its Impact on Imitation and Growth.* Working Paper. Duke University.

Corden, W. M. (1987). *On Making Rules for the International Trading System. US Trade Policies in a Changing World Economy*. The MIT Press Cambridge, Massachussetts Londres, Inglaterra.

Cornwall, J. (1977). *Modern capitalism: its growth and transformation*. London: Martin Robertson.

CPB. (2006). Macro Economische Verkenning 2006, *Netherlands Bureau for Economic Policy Analysi*s, The Hague, the Netherlands.

Cross. (2002). Cyclical implications of the rising import contents in exports. *Canadian Economic Observer*, November 1999, Statistics Canada, no. 11-010-XPB.

Dagher, J. and Kovanen, A. (2011) On the Stability of Money Demand in Ghana: A Bounds Testing Approach. *IMF Working Paper*.

Darrat, Ali. (1986). Trade and Development: The Asian Experience. *Cato Journal* vol. 6. (Fall), pp. 695-699.

Dava, E. (2012). *Trade liberalization and economic growth in the SADC: A difference in difference analysis*. In IESE conference paper (No. 8).

Davidson, R. and MacKinnon, J.G. (2004). *Econometric Theory and Methods*. Oxford University Press, Oxford.

Dickey, D.A. and Fuller W.A. (1981). Likelihood Ratio Statistics For Autoregressive Time Series with a Unit Root. *Econometrica* 49, 1057-1072.

Dickey, D.A. and Fuller, W.A. (1979). Distribution of the Estimators for Autoregressive Time Series with a Unit Root. *Journal of the American Statistical Association*, 74, 427-31.

Dodaro, S. (1993). Exports and Growth: A Reconsideration of Causality. *Journal of Developing Areas*. vol. 27, pp. 227-244.

Dollar, D. (1992). Outward-oriented developing economies really do grow more rapidly: evidence from 95 LDCs, 1976-1985. *Economic Development and Cultural Change*, 40(3), 523-544.

Dornbusch, R., S. Fischer, and P.A. Samuelson. (1980). Heckscher–Ohlin Trade Theory with a Continuum of Goods. *Quarterly Journal of Economics* 95 (September), 203–224.

Dowrick, S., & Golley, J. (2004). Trade openness and growth: who benefits? *Oxford Review of Economic Policy*, 20(1), 38-56.

Dudley, L. and M.B. Karski. (2001). *Does the degree of Openness of an Economy Affect its Economic Growth?* Openness and Growth: A panel Data Analysis for Developing Countries.

Dumitriu, R., R Stefanescu and C. Nistor. (2009). *Cointegration and Causality between Romanian Exports And Imports*. "Dunarea de Jos" University Galati, Faculty of Economic Sciences.

Dutt, Swarna D. and Dipak Ghosh. (1996).The Export Growth – Economic Growth Nexus: A Causality Analysis. *The Journal of Developing Areas,* vol. 30, pp. 167-182.

Dutta, D., & Ahmed, N. (2004). An aggregate import demand function for India: a cointegration analysis. *Applied Economics Letters*, 11(10), 607-613.

Eaton, J., and G.M. Grossman. (1986). Optimal Trade and Industrial Policy under Oligopoly. *Quarterly Journal of Economics,* 101: pp. 383-406.

Easterly, W., & Rebelo, S. (1993). Fiscal policy and economic growth. *Journal of Monetary Economics*, 32(3), 417-458.

Edwards, S. (1992). Trade orientation, distortions and growth in developing countries. *Journal of Development Economics*, 39(1), 31-57.

Edwards, S. (1988). Openness, Productivity and Growth: What to do We Really Know? *The Economic Journal,* 108, 383-98.

El-Sakka, Mohammed Ibrahim and Naief Hamad Al-Mutairi. (2000). Exports and Economic Growth: The Arab Experience. *The Pakistan Development Review, vol*. 39 No. 2 (Summer), pp. 153-169.

Engle, R.F. and Granger C.W.J. (1987). Cointegration and Error Correction: Representation, Estimation and Testing. *Econometrica,* 55 No.2, pp. 251-276.

Ertuk, K. (2001/02). Overcapacity and the East Asian Crisis. *Journal of Post Keynesian Economics,* 24(2), 253-276.

Esfani, H.S. (1991). Exports, Imports and Economic Growth in Semi-Industrialised Countries. *Journal of Development Economics,* 35:93-116.

Ethier, W. (1982). National and International Returns to Scale in the Modern Theory of International Trade. *American Economic Review*, 72, pp. 389-405.

Felipe, J. and Lim, J. (2005). *Export or Domestic-Led Growth in Asia?* Asian Development Bank.

Felipe, J. (2003). *Is Export-led Growth Passé? Implications for Developing Asia.* ERD Working Paper No. 48, Economics and Research Department, Asian Development Bank.

Fernando, U.F.N. (1988). *The Relationship between Exports and Economic Growth in Sri Lanka: an Empirical Investigation*. Central Bank Staff Studies, vol.18 No. 1 & 2, pp. 97-126.

Fiestas, I. (2005). *The effects of trade liberalization on growth, poverty and inequality*. CILAE Foundation.

Findlay, C., & Watson, A. (1996). Economic growth and trade dependency in China (No. 1996-05). *University of Adelaide, Chinese Economies Research Centre*.

Findlay, R. (1984). Growth and development in trade models. *Handbook of International Economics* vol. 1.

Fosu OAE & Magnus F.J. (2008). Aggregate import demand and expenditure components in Ghana. *Journal of Social Science*, 4(1)

Fuller, W. A. (1976). *Introduction to Statistical Time Series*. New York. John Wiley and Sons.

Funke, K., & Nickel, C. (2006). *Does fiscal policy matter for the trade account? A panel cointegration study.* European Central Bank.

Gao, T. (2004). Regional industrial growth: evidence from Chinese industries. *Regional Science and Urban Economics*, 34(1), 101-124.

Ghartey, E. E. (1993). Causal Relationship between Exports and Economic Growth: Some Empirical Evidence in Taiwan, Japan and the U.S. *Applied Economics,* vol 25, pp. 1145-1152.

Ghatak, S., & Siddiki, J. U. (2001). The use of the ARDL approach in estimating virtual exchange rates in India. *Journal of Applied Statistics*, 28(5), 573-583.

Ghei, N, and Pritchett, L. (1999), The Three Pessimisms: Real Exchange Rates and Trade Flows in Developing Countries, in *Exchange Rate Misalignment: Concepts and Measurement for Developing Countries*, edited by Hinkle. L and Montiel, P. New York: Oxford University Press, 467–96

Ghorbani, M., & Motallebi, M. (2009). Application Pesaran and Shin Method for Estimating Irans' Import Demand Function. *Journal of Applied Sciences*, 9(6), 1175-1179.

Giles, J.A. and Williams C.L. (2000). Export-led growth: a survey of the empirical literature and some non-causality results. Part 1. *The Journal of International Trade & Economic Development*: An International and Comparative Review.

Godley, W. (1999). *Seven Unsustainable Processes*. Jerome Levy Economics Institute, Annandale-on-Hudon, N.Y.

Godfrey, L. G. (1996). Mis-specification Tests and Their Uses in Econometrics, *Journal of Statistical Planning and Inference*, 49, 241-260.

Godfrey, L. G. (1988). *Mis-specification Tests in Econometrics*: *The Lagrange Multiplier Principle and Other Approaches*, Cambridge University Press, Cambridge.

Goh, A. T., & Olivier, J. (2002). Optimal Patent Protection in a Two-Sector Economy. *International Economic Review*, 43(4), 1191-1214.

Gonclaves, Reinaldo and Jurgen Richtering. (1986). *Export Performance and Output Growth in Developing Countries*. UNCTAD Discussion Paper No. 17. Geneva.

Grabowski, R. (1994). Import substitution, export promotion, and the state in economic development. *The Journal of Developing Areas*, 28(4), 535-554.

Granger, C.W.J. (1981). Some Properties of Time Series Data and Their Use in Econometric Model Specification. *Journal of Econometrics,* vol. 16, pp. 121-30.

Granger, C.W.J. (1969). Investigating Causal Relationships by Economic Models and Cross Spectral Models. *Econometrica.* vol. 37, pp. 424-438.

Greenaway, D., Morgan, W., & Wright, P. (2002). Trade liberalisation and growth in developing countries. *Journal of Development Economics*, 67(1), 229-244.

Greenaway, D. and C. Nam. (1988).Industrialization and Macroeconomic Performance in Developing Countries under Alternative Liberalization Scenarios. *Kyklos Vol*. 41 No. 3, pp. 419-435.

Greene, W. H. (2008). *The econometric approach to efficiency analysis. The measurement of productive efficiency and productivity growth*. Oxford University Press, New York, 92-250.

Gregory, A. W and B. E. Hansen. (1996). Tests for cointegration in models with regime and trend shifts. *Oxford Bulletin of Economics and Statistics*, vol. 58: 555-560.

Grossman G., Helpman E. (1991c). Quality Ladders in the Theory of Growth. *Review of Economic Studies*, 58, January, 43–61.

Grossman G., Helpman E. (1991b). Quality Ladders and Product Cycles. *Quarterly Journal of Economics,* 106, May, 557–86.

Grossman, Gene M., and Elhanan Helpman. (1991a). *Innovation and Growth in the Global Economy*. Cambridge, MA: MIT Press

Grossman, G.M. and E. Helpman. (1991). Trade, Knowledge Spillovers and Growth. *European Economic Review*, 35, pp.517-526.

Grossman, G.M. and E. Helpman. (1990). Comparative advantage and long-run growth. *American Economic Review* 80(4), 796-815.

Grossman, G. and H. Horn. (1988). Infant-Industry Protection Reconsidered: The Case of Informational Barriers to Entry. *The Quarterly Journal of Economics*, pp. 768–87.

Gupta, Sanjeev. (1985). Export Growth and Economic Growth Revisited. *The Indian Economic Journal* vol. 32, pp. 52-59.

Gujarati, D. N. (1995). *Basic Econometrics*, McGraw-Hill, Inc

Hallak, J. C., & Levinsohn, J. (2004). Fooling ourselves: evaluating the globalization and growth debate (No. w10244). *National Bureau of Economic Research*.

Hamilton, N., & Thompson, C. (1994). Export promotion in a regional context: Central America and Southern Africa. *World Development*, 22(9), 1379-1392.

Harrison, A. (1996). Openness and growth: A time-series, cross-country analysis for developing countries. *Journal of Development Economics*, 48(2), 419-447.

Hart, O. D. (1983). The market mechanism as an incentive scheme. *The Bell Journal of Economics*, 366-382.

Harvie, C and Pahlavani, M. (2006). *Sources of Economic Growth in South Korea: An Application of the ARDL Analysis in the Presence of Structural Breaks – 1980-2005*. Working Paper 06-17, Department of Economics, University of Wollongong.

Hasan, M. A., & Khan, A. H. (1994). Impact of devaluation on Pakistan's external trade: An econometric approach. *The Pakistan Development Review*, 33(4), 1205-1215.

Hausman, D.M. (2007). *The Philosophy of Economics.* An Anthology. 3rd edition. Cambridge: Cambridge University Press.

Havrylyshyn, O. (1990). Trade policy and productivity gains in developing countries: A Survey of the Literature. *The World Bank Research Observer*, 5(1), 1-24.

Heckscher, E. F. (1919). The effect of foreign trade on the distribution of national income. *Ekonomisk Tidskrift*, 21:497-512 (English translation of original Swedish published in E.F. Heckscher and B.Ohlin *Heckscher-Ohlin Trade* Theory, edited and translated by H.Flam and J.Flanders, MIT Press, Cambridge, 1991)

Heitz and Rini. (2006). Reinterpreting the contribution of foreign trade to growth. *Trésor-Economics,* No. 6, December 2006.

Helpman, E., & Krugman, P. R. (1985). *Market structure and foreign trade*: Increasing returns, imperfect competition, and the international economy. MIT press.

Hendry, D. F. (1980). Econometrics-alchemy or science? *Economica*, 387-406.

Henriques, I. And P. Sadorsky. (1996).Export-led Growth or Growth-driven Exports? The Canadian Case. *Canadian Journal of Economics* vol. 24 No. 3, pp. 540-555.

Herrerias.M.J. and Ortis.V. (2009). *Imports and Growth in China*, Department of Economics and Institute of International Economics, Universitat Jaume I.

Herzer, D. and D.F. Nowak-Lehman. (2006). Is There a Long-Run Relationship Between Exports and Imports in Chile? *Applied Economics Letters*, vol. 13, pp. 981-986.

Ho, W. S. (2004). *Estimating Macao's import demand functions*. Monetary authority of Macao, 18.

Hooper, P, Johnson K. and J. Marquez. (1998). *Trade Elasticities for G-7 Countries*. International Finance Discussion Papers No. 609, Federal Reserve Board, Washington D.C.

Huchet-Bourdon, M., Le Mouël, C. L. M., & Vijil, M. (2011). *The relationship between trade openness and economic growth*: some new insights on the openness measurement issue. In XIIIème Congrès de l'Association Européenne des Economistes Agricoles *(EAAE).*

Hughes, K. S. (1992). Trade performance of the main EC economies relative to the USA and Japan in 1992-sensitive sectors. *Journal of Common Market Studies*, 30(4), 437-454.

Humpage, O.F. (2000). *Do Imports Hinder or Help Economic Growth*? Economic Commentary, Federal Reserve Bank of Cleveland.

Hussain, M. A., & Saaed, A. A. (2014). Relationship between Exports, Imports, and Economic Growth in Saudi Arabia: 1990-2011. Evidence from Co-Integration and Granger Causality Analysis. *Journal of Emerging Trends in Economics and Management Sciences*, 5(3), 364.

Husted S. (1992). The Emerging U.S. Current Account Deficit in the 1980s: A Cointegration Analysis. *The Review of Economics and Statistics*, February: 159-166.

Hye, Q. M. A., & Boubaker, H. B. H. (2011). Exports, imports and economic growth: an empirical analysis of Tunisia. IUP *Journal of Monetary Economics*, 9(1), 6.

Hye, Q. M. A., & Siddiqui, M. M. (2010). Are imports and exports cointegrated in Pakistan? A rolling window bound testing approach. *World Applied Sciences Journal*, 9(7), 708-711.

Im, K.S., Pesaran, M.H., and Shin, Y. (1997). *Testing for Unit Roots in Heterogeneous Panels*, Mimeo, Department of Applied Economics, University of Cambridge

Islam, A. M., & Kabir Hassan, M. (2004). An econometric estimation of the aggregate import demand function for Bangladesh: Some further results. *Applied Economics Letters*, 11(9), 575-580.

Islam, N. (1995). Growth empirics: a panel data approach. *The Quarterly Journal of Economics*, 1127-1170.

Jaeger, W. (1992). The effects of economic policy on African agriculture, *World Bank Discussion Papers*, Africa Technical Department Series 147.

Jamal, O., Tang T.C, and Mohammad, H.A. (2001). Aggregate Import Demand and Expenditure Components in five ASEAN Countries: An Empirical Study. *Jurnal Ekonomi Malaysia* 35, 37-60

Jarita, D. (2006). *Determinants of Malaysian Trade Balance: An ARDL Bound Testing Approach*. 6th Global Conference on Business & Economics, October 15-17, 2006, GUTMAN conference Center, USA.

Jiranyakul, K. (2012). Linkages between Thai stock and foreign exchange markets under the floating regime. *Journal of Financial Economic Policy*, 4(4), 305-319.

Jiranyakul, K., & Brahmasrene, T. (2002). An Analysis of the Determinants of Thailand's Exports and Imports with Major Trading Partners. *Southwestern Economic Review*, 29 (1&2), 111-121.

Johansen, S. (1995). Identifying restrictions of linear equations with applications to simultaneous equations and cointegration. *Journal of Econometrics*, 69(1), 111-132.

Johansen, S. (1991). Estimation and hypothesis testing of cointegration vectors in Gaussian vector autoregressive models. Econometrica: *Journal of the Econometric Society*, 1551-1580.

Johansen, S. (1988). Statistical analysis of cointegration vectors. *Journal of Economic Dynamics and Control*, 12, 231-54.

Johnson, H.G. (1955). *Economic Expansion and International Trade*. The Manchester School vol. 23, No. 2, pp. 95-112.

Johnson, H.G. (1954). Increasing Productivity, Income-Price Trends and the Trade Balance. *The Economic Journal,* vol. 64 No.255, pp. 462-485.

Johansen, S. and K. Juselius. (1990). Maximum likelihood estimation and inference on cointegration: with applications to the demand for money, *Oxford Bulletin of Economics and Statistics*, 52, 169–210.

Jomo, K.S. (1998). *Tigers in trouble: Financial Governance, Liberalisation and Crises in East Asia.* New York, Zed Books

Jung, W. and P. Marshall. (1985). Exports, Growth and Causality in Developing Countries. *Journal of Development Economics* vol.18, pp. 1-12.

Kaldor, N. (1964). *Essays on Economic Policy*, volume 2.

Kalyoncu, H. (2006). An Aggregate Import Demand Function for Turkey. *The Indian Journal of Economics*, 86, No. 4, pp.503-511.

Kao, C. and Chiang, M.-H. (2000). *On the estimation and inference of a cointegrated regression in panel data*, in Baltagi B. H. (ed.), Advances in Econometrics: Nonstationary Panels, Panel Cointegration and Dynamic Panels, Vol. 15, pp. 179–222.

Kaplinsky, R. (1993). Export Processing Zones in the Dominican Republic: Transforming Manufactures into Commodities. *Word Development*, 21, 1851-65.

Karras, G. (2003). Trade Openness And Economic Growth Can We Estimate The Precise Effect? *Applied Econometrics and International Development*, 3(1).

Katircioglu, S. (2010). Trade and growth in a non-recognized small island state: Evidence from the Turkish republic of Northern Cyprus. *Journal of Business Economics and Management*, 11(1), 112-130.

Kavoussi, Rostam M. (1984). Export Expansion and Economic Growth: Further Empirical Evidence. *Journal of Development Economics* vol. 14, pp. 241-250.

Keller, W. (2004). International Technology Diffusion, *Journal of Economic Literature*, XLII, 752-82.

Keller, W. (2000). Do Trade Patterns and Technology Flows Affect Productivity Growth? *World Bank Economic Review* 14:17-47.

Keynes, J.M. (1936). *The General Theory of Employment, Interest and Money*, London :Macmillan,

Keong,C.C, Yusop, Z and V Liew. (2005). Export led growth hypothesis in Malaysia: An Investigation Using Bound Test. *Sunway Academic Journal* 2.

Khalafalla, K. Y., & Webb, A. J. (2001). Export-led growth and structural change: Evidence from Malaysia. *Applied Economics*, 33(3), 1703–1715.

Khan S.A., Khan S., Uz-zaman K. (2013). An estimation of disaggregated import demand function for Pakistan. *World Applied Sciences Journal*, 21(7), 1050–1056.

Khan, A. H. and N. Saqib. (1993). Exports and Economic Growth: The Pakistan Experience. *International Economic Journal* vol. 7 No. 3, pp. 53-64.

Khan, A. H., A. Malik, and L. Hassan. (1995). *Exports, Growth and Causality: An Application of Cointegration and Error-Correction Modelling*. Paper presented at the Eleventh Annual General Meeting of the Pakistan Society of Development Economists. April 18-21. PIDE, Islamabad.

Kim, Y. H. (2007). Impacts of regional economic integration on industrial relocation through FDI in East Asia. *Journal of Policy modelling*, 29(1), 165-180.

Kindleberger, C.P. (1962). *Foreign Trade and the National Economy*. Yale University Press, New Haven, CT.

Kingsley, O.K et al. (2004). *Is Trade Openness Valid for Nigeria's Long – Run Growth: A cointegration Approach.* Working Paper: African Institute for Applied Economics, Enugu.

Kneller, R., Bleaney, M. F., & Gemmell, N. (1999). Fiscal policy and growth: evidence from OECD countries. *Journal of Public Economics*, 74(2), 171-190.

Knight, M., Loayza, N., & Villanueva, D. (1993). *Testing the neoclassical theory of economic growth: a panel data approach.* Staff Papers-International Monetary Fund, 512-541.

Konya, L., and J.P. Singh. (2008) Are Indian Exports And Imports Cointegrated? *Applied Econometrics and International Development,* vol- 8-2.

Kónya, L., & Singh, J. P. (2006). *Exports, imports and economic growth in India*. Discussion Paper-La Trobe University School of Business Series A, 6.

Kranendonk, H., & Verbruggen, J. (2008). Decomposition of GDP Growth in Some European Countries and the United States. *De Economist*, 156(3), 295-306.

Kranendonk, H., & Verbruggen, J. (2005). How to determine the contributions of domestic demand and exports to economic growth? (No. 129). *CPB Netherlands Bureau for Economic Policy Analysis*.

Kranendonk, H. (1998). Bijdrage van bestedingscategorieën aan de productiegroei, CPB Internal paper nr. 988/II/1, *Netherlands Bureau for Economic Policy Analysis*, The Hague, the Netherlands.

Krishna, P. (2003). Are Regional Trading Partners "Natural"? *Journal of Political Economy*, 111(1), 202-226.

Krishna, K., Ozyildirim, A., & Swanson, N. R. (2003). Trade, investment and growth: nexus, analysis and prognosis. *Journal of Development Economics*, 70(2), 479-499.

Krueger, A.O. (1978). Foreign Trade Regimes and Economic Development: *Liberalisation Attempts and Consequences, Ballinger Pub. Co*., Cambridge, MA.

Krueger, A.O. (1974). The Political Economy of the Rent-Seeking Society. *American Economic Review*, vol. 64, No. 3. (Jun., 1974), pp. 291-303.

Krueger, A.O. (1995). *Trade Policies and Developing Nations*. Brookings Institution Press.

Krueger, A. O. (1993). Free trade agreements as protectionist devices: Rules of origin (No. w4352). *National Bureau of Economic Research*.

Krugman, P.R.; M. Obstfeld (1988). *International Economics: Theory and Policy.* Glenview: Scott, Foresman.

Krugman, P.R. (1987). Is Free Trade Passé? *The Journal of Economic Perspectives* vol. 1, No. 2, pp.131-144.

Krugman, P.R. (1984). *Import Protection as Export Promotion: International Competition in The Presence of Oligopoly and Economics of Scale*, in: H.Kierzkowski,ed.,Monopolistic Competition and International Trade. Oxford University Press, Oxford.

Krugman, P. (1979). A Model of Innovation, Technology Transfer, and The World Distribution of Income. *Journal of Political Economy*, 87: 253-266.

Kwan, A., J. Cotsomitis, and B. Kwok. (1996). Exports, Economic Growth and Exogeniety: Taiwan 1953-88. *Applied Economics* vol. 28 No. 3, pp. 467-471.

Kwan, A. and B. Kwok. (1995). Exogeniety and the Export-led Growth Hypothesis: The Case of China. *Southern Economic Journal* vol. 61 No. 8, pp. 1158-1166.

Kocherlakota, N. R., & Yi, K. M. (1996). A simple time series test of endogenous vs. exogenous growth models: An application to the United States. *The Review of Economics and Statistics*, 126-134.

Komain Jiranyakul. (2012). Are Thai Manufacturing Exports & Imports of Capital Goods Related? *Modern Economy,* vol. 3, No. 2, pp. 237-244, 2012.

Kormendi, R. C., & Meguire, P. G. (1985). Macroeconomic determinants of growth: cross-country evidence. *Journal of Monetary Economics*, 16(2), 141-163.

Kotan, Z., and M. Saygili. (1999*). Estimating an Import Function for Turkey*. Discussion Paper No.9909, The Central Bank Of The Republic Of Turkey.

Ku 'Azam Tuan Lonik. (2006). *On The Relationship between Export and Economic Growth -A Look at Malaysian Experience*. This paper is prepared for the "2nd Borneo Business Conference" organized by Universiti Malaysia Sarawak, to be held on 6-8 December 2006.

Lai, Y.W. (2004). The role of domestic demand in the economic growth of Malaysia: a cointegration analysis. *International Economic Journal*, 18, 337 – 352.

Lal, D., & Rajapatirana, S. (1987). Foreign trade regimes and economic growth in developing countries. *The World Bank Research Observer*, 2(2), 189-217.

Lancaster, K. (1980). Intra-industry trade under perfect monopolistic competition. *Journal of International Economics*, 10(2), 151-175.

Lanne, M., H. Lutkepohl, and P. Saikkonen. (2003). Test Procedures for Unit Roots in Time Series with Level Shifts at Unknown Time. *Oxford Bulletin of Economics and Statistics* 65, no. 1, 91-115.

Lanne, M., H. Lutkepohl, and P. Saikkonen. (2002). Comparison of Unit Root Tests for Time Series with Level Shifts. *Journal of Time Series Analysis* 23, no. 6, 667-85.

Lawrence,R. and Weinstein, D. (1999). Trade and Growth: Import-led and Export-led? Evidence from Japan and Korea. *National Bureau of Economic Research*.

Leamer, E. E. (1980). The Leontief Paradox Reconsidered. *Journal of Political Economy* 88 (3): 495–503.

Lee, J.W. (1995). Capital Goods Imports and Long-run Growth. *Journal of Development Economics* 48(1):91-110.

Lee, E. (1996). Globalization and employment: Is anxiety justified. I*nternational Labor Review,*Vol. 135 (1996), No. 5.

Leontief, W. W. (1953). Domestic Production and Foreign Trade: The American Capital Position Re-examined. *Proceedings American Philosophical Society* 97: 332–349.

Levin, A., C.-F. Lin, and C.-S. J. Chu. (2002). Unit root tests in panel data: Asymptotic and finite-sample properties. *Journal of Econometrics* 108: 1–24.

Leybourne, S. J., & Newbold, P. (2003). Spurious rejections by cointegration tests induced by structural breaks. *Applied Economics*, 35(9), 1117-1121.

Li, Y., Chen, Z., & San, C. (2010). Research on the Relationship between Foreign Trade and the GDP Growth of East China—Empirical Analysis Based on Causality. *Modern Economy*, 1(02), 118.

Lim, C.Y. (2004). Southeast Asia: The Long Road Ahead, 2nd Edition. *World Scientific*, Singapore.

Linda, F. DeBenedictis and David, E.A Giles. (1996). Diagnostic Testing in Econometrics: Variable Addition, RESET and Fourier Approximations. *Handbook of Applied Economic Studies*, Marcel Dekker, New York, pp.383-417.

Linder, S. B. (1961). *An essay on trade and transformation* (pp. 82-109). Stockholm: Almqvist & WiksellsBoktryckeri AB.

Lipsey, R.G. and Lancaster, K. (1956). The General Theory of Second Best. *The Review of Economic Studies* vol. 24 No. 1, pp. 11-32.

Little, I., Scitovsky, T., & Scott, M. (1970). Industry and trade in some developing countries: (Oxford University Press for the O.E.C.D. Development Center). *Journal of International Economics*, vol. 2, issue 3, 303-305.

Liu, T., & Li, K. W. (2001). Impact of financial resources liberalization in China's economic growth: provincial evidence. *Journal of Asian Economics*, 12(2), 245-62.

Love, J., & Chandra, R. (2004). Testing Export-Led Growth in India, Pakistan and Sri Lanka Using a Multivariate Framework. *The Manchester School*, 72(4), 483-496.

Lucas, R. (1988). On The Mechanics of Economic Development. *Journal of Monetary Economics*, 22: 3-42.

Lumsdaine, R. L., & Papell, D. H. (1997). Multiple trend breaks and the unit-root hypothesis. *Review of Economics and Statistics*, 79(2), 212-218.

Mahadevan, R., & Suardi, S. (2008). A dynamic analysis of the impact of uncertainty on import-and/or export-led growth: The experience of Japan and the Asian Tigers. *Japan and the World Economy*, 20(2), 155-174.

Malhotra, M., & Meenu. (2009). Imports—growth relationship in India: Causality analysis. *Indian Journal of Economics*, LXXXX(356), 33–46.

Malley, J., & Moutos, T. (2002). Vertical product differentiation and the import demand function: theory and evidence. *Canadian Journal of Economics*, 35(2), 257-281.

Marbuah, G. (2013). Modelling import demand behaviour in Ghana: a re-examination. *Economics Bulletin*, 33(1), 482-493.

Marin, D. (1992). Is the Export-Led Growth Hypothesis Valid for Industrialized Countries? *Review of Economics and Statistics*, pp. 678-688.

Mazumdar, J. (2001). Imported machinery and growth in LDCs. *Journal of Development Economics,* 65, 209–224.

McCombie, J. S. L, and A.P. Thirlwall. (1994*). Economic Growth and the Balance of Payments Constraint*. New York: St. Martin's Press.

McKinnon, R. I. (1964). Foreign exchange constraints in economic development and efficient aid allocation. *The Economic Journal*, 388-409.

Meier, Gerald M. (1976). *Conditions of export-led development* – A Note, in Leading Issues in Economic Development, ed., G. Meier, Oxford University Press, New York.

Michael, H. (2002). Causality between exports, imports and income in Trinidad and Tobago. *International Economic Journal*, 16(4), 97-106.

Michaely, M. (1977).Exports and Growth: An Empirical Investigation. *Journal of Development Economics* vol. 4, pp. 49-53.

Milberg, W. (2002). *Say's Law in the Open Economy*: Keynes' Rejection of the Theory of Comparative Advantage. Keynes, Uncertainty and the Global Economy, pp. 239-253.

Mill,J.S. (1909). *Principles of Political Economy with some of their Applications to Social Philosophy.* London; Longmans, Green & Co.

Ministry of Finance of Denmark. (2006). *Economic Survey*. English Summary.

Mishra, V., Sharma, S., & Smyth, R. (2010). *Is Economic Development in the Pacific Island countries export-led or import-led?* Pacific Economic Bulletin, 25(1), 46–63.

Mohammad H.A., Tang T.C. (2000). *Aggregate imports and expenditure components in Malaysia: A cointegration and error correction analysis*. ASEAN Economic Bulletin, 17(3), 257–269.

Mohamed, M.B.H, S. Saafi and A. Farhat. (2014). *Testing the Causal Relationship Between Exports and Imports Using a Toda and Yamamoto Approach*. Evidence From Tunisia. International Conference on Business 2, 75-80.

Mollik, Abu Taher. (1996). Export Led Growth and Causality in Bangladesh. *Asian Economic Review*, vol. 38 No. 2, pp. 297-307.

Mookerjee, R. (2006). A meta-analysis of the export growth hypothesis. *Economics Letters*, 91, 395 – 401.

Muscatelli, V.A. (1994). Demand and Supply Factors in the Determination of NIE Exports: A Reply. *The Economic Journal*, vol. 104 No. 427 pp. 1415-1417.

Musibau Adetunji Babatunde. (2014). Are Exports and Imports Cointegrated? Evidence from Nigeria. *Journal of International and Global Economic Studies*, 7(2), 45-67.

Mutairi, Naief Al. (1993). Exports and Pakistan's Economic Development. *Pakistan Economic and Social Review,* vol. 31 (Winter) No. 2, pp. 134-146.

Mwega, F. M. (1993). Import demand elasticities and stability during trade liberalization: A case study of Kenya. *Journal of African Economies*, 2(3), 381-416.

Naderi, P. (2013). A Study on the Relation between Import and Economic Growth based on Data from 40 Countries using ARDL and VECM Methods. *Switzerland Research Park Journal*, 102(11).

Nandi, S., & Kumar, S. (2005). Variability of exports and imports in Indian perspective: An empirical study. *Asia Pacific Business Review*, 1(1), 68-75.

Nandi, S. (1991). Export and Economic Growth in India: Empirical Evidence. *Indian Economic Journal,* vol. 38, No. 3, pp. 53-59.

Narayan, S., & Narayan, P. K. (2005). An empirical analysis of Fiji's import demand function. *Journal of Economic Studies*, 32(2), 158-168.

Narayan, P.K. (2004). Economic Impact of Tourism on Fiji's Economy: Empirical Evidence from the Computable General Equilibrium. *Tourism Economics*, vol. 10 No. 4, pp. 419-433.

Nelson, C. R., & Plosser, C. R. (1982). Trends and random walks in macroeconmic time series: some evidence and implications. *Journal of Monetary Economics*, 10(2), 139-162.

Nelson, R. R., & Winter, S. G. (1974). Neoclassical vs. evolutionary theories of economic growth: critique and prospectus. *The Economic Journal*, 84(336), 886-905.

Nourzad, F., & Powell, J. J. (2003). Openness, growth, and development: evidence from a panel of developing countries. *Scientific Journal of Administrative Development*.

Obadan, M.I and E.I. Okojie. (2010). An Empirical Analysis of the Impact of Trade on Economic Growth in Nigeria. *Jos Journal of Economics*. 4(1).

Ohlin, B. (1933). *Interregional and International Trade*, Cambridge, Mass.: Harvard University Press.

Omoke, P. C. (2012). Insurance Market Activity and Economic Growth: Evidence from Nigeria. Acta Universitatis Danubius: *Oeconomica,* 8(2).

Pack, H., & Page, J. M. (1994). *Accumulation, exports, and growth in the high-performing Asian economies*. In Carnegie-Rochester Conference Series on Public Policy (vol. 40, pp. 199-235). North-Holland.

Pahlavani, M., Valadkhani, A., & Worthington, A. C. (2005). *Testing for structural breaks in Australia's monetary aggregates and interest rates*: an application of the innovational outlier and additive outlier models. Working Paper Series, No. WP05-02, Faculty of Commerce-Papers, 204, University of Wollongong.

Palley, T.I. (2011). The Contradictions of Export-Led Growth, Public Policy Briefs, Levy *Economics Institute of Bard College.*

Palley, T.I (2004). The Economic Case for International Labor Standards. Cambridge *Journal of Economics*, 28, 21-36

Palley, T.I. (2003a). *International Trade, Macroeconomics, and Exchange Rates: Re-examining the Foundations of Trade Policy*. Presented at a conference on Globalization and the Myths of Free Trade held at the New School for Social Research, New York.

Palley, T.I. (2003b). *Export-Led Growth*: Evidence of Developing Country Crowding-Out? Edward Elgar Publishing.

Palley, T. I. (2002). *A New Development Paradigm: Domestic Demand-Led Growth*. Why It is Needed & How To Make it Happen. Discussion Paper, Foreign Policy in Focus September: 1-8.

Palley, T. I. (2000a). *Plenty of nothing*: The downsizing of the American dream and the case for structural Keynesianism. Princeton University Press.

Panagariya, A. (2004). Miracles and Debacles: In Defence of Trade Openness. *The World Economy*, 27(8), 1149-1171.

Payam, N. (2013). A Study on the Relation between Import and Economic Growth based on Data from 40 Countries using ARDL and VECM Methods, *Switzerland Research Park Journal.*

Patterson, K. (2000). *An Introduction to Applied Econometrics*: A Time Series Approach, Palgrave.

Pedroni, P. (2004). Panel Cointegration: Asymptotic and finite samples properties of pooled time series Tests with an application to the PPP hypothesis. *Economic Theory* 20: 597-625.

Pedroni, P. (2001). Purchasing Power Parity Tests in Cointegrated Panels. *The Review Econonomic Statistics*, 83(4),727-731.

Pedroni, P. (2000). Fully-Modified OLS for Heterogeneous Cointegration Panel in Nonstationary Panels, Panel Cointegration and Dynamic Panels, *Advances in Economics*. 15, 93-130.

Pedroni, P. (1999). *Critical Values for Cointegration Tests in Heterogeneous Panels with Multiple Regressors*, Oxford Bulletin Economic Statistics, Special Issue 61:653-678.

Pedroni, P. (1997a). *Panel Cointegration ; Asymptotic and Finite Sample Properties of Pooled time Series Tests, With an Application to The PPP Hypothesis*: New Results", Indiana University Working Papers In Economics.

Pedroni, P. (1996). *Fully Modified OLS for Heterogenous Cointegrated Panels and The Case Of Purchasing Power Parity*. Working paper, North American Econometric Society Summer Meeting, 96-120.

Perron, P. (1997). Further evidence on breaking trend functions in macroeconomic variables. *Journal of Econometrics*, 80(2), 355-385.

Perron, P. (1994). Trend, unit root and structural change in macroeconomic time series. *Escola de Pós-Graduação em Economia da FGV*.

Perron, P. (1989). The great crash, the oil price shock, and the unit root hypothesis. Econometrica: *Journal of the Econometric Society*, 1361-1401.

Pesaran, M.H., Shin. Y, Smith, R.J. (2001). Bounds Testing Approaches to the Analysis of Level Relationships. *Journal of Applied Econometrics* 16, 289-326

Pesaran, M.H., Haque, N.U., and Sharma, S. (2000). *Neglected heterogeneity and dynamics in Cross-country Savings Regressions*, chapter 3 p53-82 of J. Krishnakumar and E. Rouchetti (Eds) Panel Data Econometrics – Future Directions: Papers in Honour of Prof. Balestra, Contributions to Economic Analysis, Elsevier Science.

Pesaran, M.H. and Shin, Y. (1999). *An Autoregressive Distributed Lag Modelling Approach to Cointegration Analysis*. Chapter 11 in Econometrics and Economic Theory in the 20th Century: The Ragnar Frisch Centennial Symposium. Cambridge Univeristy Press: Cambridge.

Pesaran, M.H. and Smith, R.J. (1998). Structural Analysis of Cointegrating VARs. *Journal of Economic Surveys,* vol. 12, pg. 471-505.

Pesaran, M.H. and Pesaran, B. (1997). *Working with Microfit 4.0*: Interactive Econometric Analysis. Oxford University Press.

Pesaran, M.H. and Shin, Y. (1996). Cointegration and Speed of Convergence to Equilibrium. *Journal of Econometrics* vol. 71, pg. 177-143.

Phillips, P. C. B. and Moon, H. R. (1999). Linear regression limit theory for nonstationary panel data. *Econometrica*, Vol. 67, pp. 1057–1111.

Phillips, P. C. B. and Moon, H. R. (2000). Nonstationary panel data analysis: an overview of some recent development. *Econometric Reviews*, Vol. 19, pp. 263–286.

Phillips, P. C. B. and Sul, D. (2002). *Dynamic panel estimation and homogeneity testing under cross section dependence.* Yale University, mimeo.

Phillips, Peter and Pierre Perron. (1998).Testing for a Unit Root in Time Series Regression. *Biometrica*, vol. 75 (June), pp. 335-346.

Piehl, A. M., Cooper, S. J., Braga, A. A., & Kennedy, D. M. (1999*). Testing for structural breaks in the evaluation of programs.* National Bureau of Economic Research.

Pillay, S. (2014). The Long Run Relationship between Exports and Imports in South Africa: Evidence from Cointegration Analysis. World Academy of Science, Engineering and Technology. *International Journal of Social, Management, Economics and Business Engineering,* vol:8 No:6.

Pinelopi. K., Goldberg, Amit Khandelwal, Nina Pavenik, Petia Topalova. (2008). *Imported Intermediate Inputs and Domestic Product Growth*: Evidence from India. National Bureau of Economic Research.

Prasch, R.E. (1996). Reassessing the Theory of Comparative Advantage. *Review of Political Economy,* vol. 8 No. 1, pp.37-56

Prebisch. (1950). *The Economic Development of Latin America and Its Principal Problems*. UN document no. E/CN.12/89/Rev.1. Lake Success, N.Y.: United Nations.

Ram, R. (1987). Exports and Economic Growth: Evidence from Time-Series and Cross-Section Data. *Economic Development and Cultural Change,* vol. 36: 51-72.

Ram, R. (1986). Government size and economic growth: A new framework and some evidence from cross-section and time-series data. *American Economic Review*, 76(1), 191-203.

Ram, R. (1985). Exports and Economic Growth: Some Additional Evidence. *Economic Development and Cultural Change*, vol. 33, 415-425.

Rammadhan, M. and A. Naseeb. (2008). The long-run relationship between oil exports and aggregate imports in the gcc: Cointegration analysis. *Journal of Economic Cooperation*, 29(2): 69-84.

Ramos, F.F.R. (2001). Exports, Imports and Economic Growth in Portugal: Evidence from Causality and Cointegration Analysis. *Economic Modelling* 18:613-23

Rana, Pradumna B. (1985). *Exports and Economic Growth in the Asian Region*. ADB Economic Staff Paper No. 25.

Reinhart, C. M. (1995). *Devaluation, Relative Prices, and International Trade*: Evidence from Developing Countries. IMF Staff Papers 42, no. 2: 290-312.

Ricardo, D. (1817). *On the Principles of Political Economy and Taxation*. Murray, London.

Riezman, R., & Wilson, J. D. (1995). Politics and trade policy. *Modern Political Economy*, 108-44.

Rivera-Batiz, F.L. (1985). *International Finance and Open Economy Macroeconomics*. New York: Macmillan.

Rivera-Batiz, L. A., & Romer, P. M. (1991). International trade with endogenous technological change. *European Economic Review*, 35(4), 971-1001.

Rodríguez, F. (2007). *Openness and growth: what have we learned?* Desa Working Paper, Economics and Social Affairs.

Rodriguez, F. and Rodrik, D. (2001). *Trade Policy and Economic Growth: A Skeptic's Guide to the Cross.*National Evidence. National Bureau of Economic Research.

Rodrik, D. (2009). *Growth after the Crisis*. Working Paper No 5, Commission on Growth and Development.

Rodrik, D. (1999). *The new global economy and developing countries: making openness work.* Washington, DC: Overseas Development Council.

Romer, D. H., & Frankel, J. A. (1999). Does trade cause growth? *American Economic Review*, 89(3), 379-399.

Romer, P.M. (1990). Endogenous Technological Change. *The Journal of Political Economy*, 98 (5): 71-102.

Romer, P. M. (1987). Growth based on increasing returns due to specialization. *American Economic Review*, 77(2), 56-62.

Sachs, J. and Warner, A. (1995). Economic Convergence and Economic Policies. *Brookings Papers on Economic Activity*, 1:1-95

Said, S. E., & Dickey, D. A. (1984). Testing for unit roots in autoregressive-moving average models of unknown order. *Biometrika*, 71(3), 599-607.

Samuelson, P.A. (1948). International Trade and Equalisation of Factor Prices. *Economic Journal*, 58 June. p. 163–184.

Sapsford, D and Singer, H. (1998). The IMF, the World Bank, and Commodity Prices: A Case of Shifting Sands? *Word Development*, 26,1653-60

Sarkar, P. (2007). *Trade Openness and Growth: Is There Any Link*? (No. 4997). University Library of Munich, Germany.

Sarkar P, & Singer HW. (1991). Manufactured exports of developing countries and their terms of trade since 1965. *World Development*, vol. 19 (4), pp333–340.

Sarmad, K. (1989). *The determinants of import demand in Pakistan*. World Development, 17(10), 1619-1625.

Saunders, Peter J. (2008). A time series analysis of the role of imports in India's phenomenal economic growth. *Indian Journal of Economics and Business*, 7(1), 101–109.

Schott, P. K. (2004). Across-product versus within-product specialization in international trade. *The Quarterly Journal of Economics*, 647-678.

Schwert G. (1989). Tests for unit roots: a Monte Carlo investigation', *Journal of Business and Economic Statistics*, 7, 147 -159.

Seguino, S. (2000). *The Roots of the Asian Financial Crisis*: A Story of Export-Led Growth and Liberalized Capital Flows. Political Economy and Contemporary Capitalism: Radical Perspectives on Economic Theory and Policy, Taylor & Francis.

Sen, Amit. (2003). On Unit-Root Tests When the Alternative Is a Trend-Break Stationary Process. *Journal of Business & Economic Statistics*, American Statistical Association, vol. 21(1), pages 174-84, January.

Senhadji, A. (1997). *Time-series estimation of structural import demand equations: A cross-country analysis.* Working Paper, International Monetary Fund.

Serletis, A. (1992). Export Growth and Canadian Economic Development. *Journal of Development Economics* 38: 135-145.

Shirazi, N. S. and Manap, T. A. A. (2004). Export led growth hypothesis: further Econometric evidence from Pakistan. *Pakistan Development Review*, vol. 43: p 472-88

Shirazi, N. S., & Manap, T. A. A. (2005). Export-led growth hypothesis: further econometric evidence from *South Asia. Developing Economies*, 43(4), 472-488.

Sims, C. (1972). Money, Income and Causality. *American Economic Review* vol. 62. No.3, pp. 540-552.

Singer. (1950). *The Distribution of Gains between Investing and Borrowing Countries.* In The Strategy of International Development: Essays in the Economics of Backwardness. London: Macmillan.

Singh, T. (2010). Does international trade cause economic growth? *A survey. The World Economy*, 33(11), 1517-1564.

Sinha, T. & D. Sinha. (1996). The Relationship between Openness and Economic Growth: Post War Evidence from 124 Countries. *Seoul Journal of Economics.*

Sjoeholm, F. (1999). *Exports, Imports and Productivity: Results from Indonesian Establishment Data*. Working Paper Series in Economics and Finance, 183, Stockholm School of Economics.

Smith,A. (1776). *The Wealth of Nations.* William Strahan, Thomas Cadell.

Solomon, Kidane. (2000). *The structure and behaviour of import demand in Ethiopia.* Unpublished M.Sc. Thesis, Addis Ababa University, Ethiopia.

Stavrinos, V. G. (1987). The intertemporal stability of Kaldor's first and second growth laws in the UK. *Applied Economics*, 19(9), 1201-1209.

Stock, J. H., & Watson, M. W. (1988). A probability model of the coincident economic indicators. Working Paper, National Bureau of Economic Research.

Stolper W.F. and Samuelson P.A. (1941). Protection and Real Wages. *The Review of Economic Studies* vol. 9 No. 1, pp. 58-73.

Summers, R., & Heston, A. (1991). *The Penn World Table (Mark 5): an expanded set of international comparisons, 1950-1987*. Working Paper, National Bureau of Economic Research.

Tahir, M., & Dk, N. (2013). The Relationship between Trade and Income: The Case of Developed Countries. *International Research Journal of Finance and Economics*.

Tang, T. C. (2006). Are imports and exports in the OIC member countries cointegrated? A re- examination. *IIUM Journal of Economics and Management*. 14 (1), 1-31.

Tang, T.C. and A.H. Mohammad. (2005). Are imports and exports of oic countries cointegrated? An empirical study. *Labuan Bulletin of International Business and Finance*, 3: 33-47.

Tang, T. C. (2003). An empirical analysis of China's aggregate import demand function. *China Economic Review*, 14(2), 142-163.

Tang, T. C. (2002). Determinants of aggregate import demand in Bangladesh. *Journal of Bangladesh Studies*, 4(2), 37-46.

Tang, T. C., & Nair, M. (2002). A cointegration analysis of Malaysian import demand function: reassessment from the bounds test. *Applied Economics Letters*, 9(5), 293-296.

Tang, T.C. & Mohammad H.A. (2000). An Aggregate Import Demand Function for Malaysia: A Cointegration and Error Correction Analysis. *Utara Management Review* 1(1):43-57.

Taylor, J. B. (1988). The treatment of expectations in large multicountry econometric models. In Empirical macroeconomics for interdependent economies. *Brookings Institution Washington, DC*.

Taylor, A. M. (1995). *Growth and convergence in the Asia-Pacific region: on the role of openness, trade and migration*. Working Paper, National Bureau of Economic Research.

Taylor, L. (1993). *A Three-Gap Analysis of Foreign Resource Flows and Developing Country Growth*. In L. Taylor, ed., The Rocky Road to Reform: Adjustments, Income Distribution and Growth in the Developing World. Cambridge, MA: MIT Press.

Temple, J. (1999). The new growth evidence. *Journal of economic Literature*, 37(1), 112-156.

Thomas, V., & Wang, Y. (1996). Distortions, interventions, and productivity growth: is East Asia different?. *Economic Development and Cultural Change*, 44(2), 265-288.

Toda, H. Y., & Phillips, P. C. (1993). The spurious effect of unit roots on vector autoregressions: an analytical study. *Journal of Econometrics*, 59(3), 229-255.

Tong, H. (1995). A personal overview of non-linear time series analysis from a chaos perspective. *Scandinavian Journal of Statistics*, 22, 399–445.

Trefler, D. (1995). The Case of Missing Trade and Other HOV Mysteries. *American Economic Review* 85 (5): 1029–1046.

Tura, Kebede. (2001). *Determinants of international trade flows: The case of Ethiopian.* Unpublished M.Sc. Thesis, Addis Ababa University, Ethiopia.

Tybout, J. R. (2000). Manufacturing firms in developing countries: How well do they do, and why?. *Journal of Economic literature*, 38(1), 11-44.

Tyler, William G. (1981). Growth and Export Expansion in Developing Countries: Some Empirical Evidence. *Journal of Development Economics,* vol. 9, pp. 121-130.

Ulasan, B. (2012). Openness to international trade and economic growth: a cross-country empirical investigation. *Economics Discussion Paper*, (2012-25).

Ullah, S., Zaman, B., Farooq, M., & Javid, A. (2009). Cointegration and causality between exports and economic growth in Pakistan. *European Journal of Social Sciences*, 10(2), 264-272.

Vamvakidis, A. (2002). How robust is the growth-openness connection? Historical evidence. *Journal of Economic Growth*, 7(1), 57-80.

van der Helm, R. & Hoekstra, R. (2010). *Attributing GDP growth of the Euro Area to final demand categories.* Statistics Netherlands (CBS) Report to the European Central Bank, Amsterdam.

van der Helm, R., & Hoekstra, R. (2008). *Attributing quarterly data GDP growth rates of the Euro Area to final demand components*. Statistics Netherlands (CBS) Report to the European Central Bank, Amsterdam.

Vernon, R. (1966). International investment and international trade in the product cycle. *The Quarterly Journal of Economics*, 190-207.

Verdoorn, J. P. (1949). On the factors determining the growth of labor productivity. *Italian Economic Papers*, 2, 59-68.

Vogelsang, T. J., & Perron, P. (1998). Additional tests for a unit root allowing for a break in the trend function at an unknown time. *International Economic Review*, 1073-1100.

Wade, R. (1990). *Governing the market: Economic theory and the role of government in East Asian industrialization*. Princeton University Press.

Wah L. Y. (2004).The role of domestic demand in the economic growth of Malaysia: a cointegration analysis. *International Economic Journal,* volume 18, Issue 3.

Walde, K., & Wood, C. (2004). The empirics of trade and growth: Where are the policy recommendations? *International Economics and Economic Policy*, 1, 275-292.

White, H. (1994), *Estimation, Inference and Specification Analysis*. Cambridge University Press, Cambridge.

Wong, H. T. (2008). Exports And Domestic Demand: Some Empirical Evidence In Asean-5. *Labuan Bulletin of International Business and Finance* 6. pp. 39-55.

Wong, H. T. (2007). Export, Domestic Demand and Economic growth: some empirical evidence of the Middle East Countries. *Journal of Economic Cooperation* 28, 2 (2007), 57-82.

Xu, Zhenhui. (1996). On the Causality between Export Growth and GDP Growth: An Empirical Re-investigation. *Review of International Economics* vol. 4 No.2 (June), pp. 172-184.

Xue-lian, J. X. Y. G. (2004). A Study on Estimating Agglomeration Economies of China Urban: The Case of Tianjin [J]. *Urban Studies*, 1, 009.

Yanikkaya, H. (2003). Trade Openness and Economic Growth: Across – Country Empirical Investigation. *Journal of Development Economics*, 72: 57-89.

Yarbrough, B. V., & Yarbrough, R. M. (1994). International contracting and territorial control: the boundary question. *Journal of Institutional and Theoretical Economics* (JITE), 239-264.

Yavuz, N.Ç. and Güriş, B. (2006). An Aggregate Import Demand Function for Turkey: The Bounds Testing Approach. *METU Studies in Development*, 33, pp. 311-325.

Young, M. D. (1994). Ecologically-accelerated trade liberalisation: a set of disciplines for environment and trade agreements. *Ecological Economics*, 9(1), 43-51.

Young, A. (1991). Learning-By-Doing and The Dynamic Effects of International Trade. *Quarterly Journal of Economics*.

Zellner, A. (1988). Causality and Causal Laws in Economics. *Journal of Econometrics* vol. 39, pp. 7-21.

Zhang, X. and J. Hu. (1999). Behind Free Trade: Import and China's Economic Development. *Intertrade*, April 1998. vol. 208.

Zivot, E., & Andrews, D. W. (1992). Further Evidence on the Great Crash, the Oil-Price Shock, and the Unit-Root. *Journal of Business & Economic Statistics*, 10(0), 3.

APPENDICES

Appendix A

Appendix A-1

Table 2.1

Illustrative Input-Output Approach

	Economic sector	Final Demand	Total
Economic Sector	Z	Y	x
Primary Inputs	W	V	U
Total	A	B	

Note: Z: intermediate supplies; W: primary inputs; A: total economic sector; Y: final demand for economic sector; V: final demand for primary inputs; B: total final demand; x: total economic sector; U: total primary inputs

Appendix B

Appendix B-1

Table 4.2A
Indonesia: ADF Test for Unit Root

	Level		1st Difference	
	Constant	Constant +Trend	Constant	Constant +Trend
lnPvC	-1.4063	-2.2552	-4.0270*	-4.0172**
	(0.5629)[0]	(0.4411)[0]	(0.0052)[0]	(0.0221)[0]
lnPuC	0.7945	-1.3138	-3.3751**	-3.5700***
	(0.9918)[0]	(0.8607)[0]	(0.0224)[0]	(0.0543)[0]
lnGFCF	-0.4988	-2.3491	-4.0446*	-3.9873**
	(0.8757)[0]	(0.3942)[1]	(0.0052)[1]	(0.0243)[1]
lnX	-1.3614	-3.0181	-6.4391*	-6.3448*
	(0.5884)[0]	(0.1472)[0]	(0.0000)[0]	(0.0001)[0]
lnM	-1.3722	-2.3927	-4.8621*	-4.7669*
	(0.5792)[0]	(0.3740)[0]	(0.0007)[0]	(0.0045)[0]
lnS	0.0631	-1.3037	-4.4406*	-4.4518*
	(0.9560)[0]	(0.8634)[0]	(0.0020)[0]	(0.0088)[0]
lnMCONS	-0.5936	-2.3807	-5.1787*	-5.0633*
	(0.8551)[0]	(0.3796)[0]	(0.0003)[0]	(0.0023)[0]
lnMINT	-0.6687	-1.9432	-5.8848*	-5.8072*
	(0.8371)[0]	(0.6024)[0]	(0.0001)[0]	(0.0004)[0]
lnMCAP	-1.1232	-1.696	-5.1814*	-5.1683*
	(0.6901)[0]	(0.7228)[0]	(0.0003)[0]	(0.0018)[0]
lnXCONS	-0.3822	-2.5210	-5.3450*	-5.2245*
	(0.8979)[0]	(0.3161)[0]	(0.0002)[0]	(0.0016)[0]
lnXINT	-1.0058	-2.5518	-5.1922*	-4.999*
	(0.7351)[0]	(0.3030)[0]	(0.0003)[0]	(0.0027)[0]
lnXCAP	-7.4233*	-6.3826*	-4.2633*	-5.5435*
	(0.0000)[1]	(0.0001)[1]	(0.0030)[0]	(0.0008)[0]

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.2B
Malaysia: ADF Test for Unit Root

	Level		1st Difference	
	Constant	Constant +Trend	Constant	Constant +Trend
lnPvC	0.1166	-1.7632	-4.0171*	-4.0487**
	(0.9606)[0]	(0.6919)[0]	(0.0053)[0]	(0.0214)[1]
lnPuC	-0.3903	-3.1063	-6.6443*	-6.4978*
	(0.8965)[0]	(0.1292)[3]	(0.0000)[0]	(0.0001)[0]
lnGFCF	-1.5365	-2.2164	-4.2190*	-3.5075***
	(0.4991)[0]	(0.4608)[0]	(0.0033)[0]	(0.0622)[1]
lnX	-3.8713*	-1.6558	-3.6740**	-4.8786*
	(0.0071)[0]	(0.7405)[0]	(0.0115)[0]	(0.0035)[0]
lnM	-2.5390	-2.8276	-4.7890*	-5.0278*
	(0.1188)[0]	(0.2012)[0]	(0.0009)[0]	(0.0025)[0]
lnS	-2.3117	-3.4268***	-3.6544**	-3.7230**
	(0.1762)[0]	(0.0704)[0]	(0.0121)[0]	(0.0402)[0]
lnMCONS	-0.1357	-2.1441	-5.4924*	-5.4954*
	(0.9348)[0]	(0.4980)[0]	(0.0002)[0]	(0.0009)[0]
lnMINT	-0.7393	-2.7092	-5.5243*	-5.4017*
	(0.8187)[0]	(0.2414)[0]	(0.0002)[0]	(0.0011)[0]
lnMCAP	-3.4558**	-2.9010	-4.7584*	-5.1496*
	(0.0183)[0]	(0.1788)[0]	(0.0009)[0]	(0.0019)[0]
lnXCONS	-2.0333	-2.8991	-4.9100*	*-5.1242
	(0.2716)[0]	(0.1794)[0]	(0.0006)[0]	(0.0006)[0]
lnXINT	-1.2640	-2.5007	-4.5318*	-4.6307*
	(0.6297)[0]	(0.3249)[0]	(0.0016)[0]	(0.0060)[0]
lnXCAP	-4.0651*	-2.5366	-3.9357*	-4.5603*
	(0.0045)[0]	(0.3094)[0]	(0.0064)[0]	(0.0070)[0]

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.2C
Philippines: ADF Test for Unit Root

	Level		1st Difference	
	Constant	Constant +Trend	Constant	Constant +Trend
lnPvC	1.0188	-4.3707**	-3.2182**	-3.1400
	(0.9947)[1]	(0.0182)[4]	(0.0406)[4]	(0.1355)[4]
lnPuC	-0.6100	-4.2646**	-2.2732	-0.9983
	(0.8406)[4]	(0.0201)[3]	(0.1918)[3]	(0.9130)[3]
lnGFCF	3.4735	-0.5809	-0.7625	-6.5231*
	(1.0000)[2]	(0.9663)[2]	(0.8006)[3]	(0.0003)[1]
lnX	0.4757	-3.7671**	-6.6950*	-6.8747*
	(0.9805)[1]	(0.0422)[0]	(0.0000)[0]	(0.0002)[0]
lnM	1.1800	-2.9852	-6.0979*	-6.6816*
	(0.9965)[1]	(0.1611)[0]	(0.0001)[0]	(0.0002)[0]
lnS	2.3542	-1.7674	-3.0335***	-4.1166**
	(0.9999)[0]	(0.6800)[0]	(0.0506)[0]	(0.0232)[0]
lnMCONS	0.3163	-2.6756	-4.6534*	-4.6737*
	(0.9723)[1]	(0.2579)[4]	(0.0020)[0]	(0.0083)[0]
lnMINT	-0.1723	-2.9629	-4.4891*	-4.8507*
	(0.9269)[0]	(0.1669)[0]	(0.0028)[0]	(0.0060)[0]
lnMCAP	-3.7029**	-3.5168***	-6.1709*	-5.9286*
	(0.0161)[4]	(0.0741)[4]	(0.0001)[0]	(0.0008)[0]
lnXCONS	-0.2167	-2.3076	-3.0913**	-2.9949
	(0.9207)[0]	(0.4071)[3]	(0.0454)[0]	(0.1600)[0]
lnXINT	-0.5748	-2.6230	-4.1519*	-4.0839**
	(0.8546)[0]	(0.2750)[0]	(0.0055)[0]	(0.0246)[0]
lnXCAP	-3.2873**	-2.9117	-3.3599**	-3.1699
	(0.0303)[0]	(0.1806)[0]	(0.0270)[0]	(0.1212)[0]

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.2D

Singapore: ADF Test for Unit Root

	Level		1st Difference	
	Constant	Constant +Trend	Constant	Constant +Trend
lnPvC	-2.3802	-1.3890	-3.9874*	-4.9963*
	(0.1570)[0]	(0.8391)[0]	(0.0057)[0]	(0.0029)[1]
lnPuC	-2.0477	-0.9709	-5.1938*	-5.9972*
	(0.2660)[0]	(0.9304)[0]	(0.0003)[0]	(0.0003)[0]
lnGFCF	-1.4155	-4.8067*	-2.3317	-2.2656
	(0.5577)[1]	(0.0050)[4]	(0.1724)[4]	(0.4317)[4]
lnX	-2.1563	-1.1693	-3.8510*	-4.4127*
	(0.2260)[0]	(0.8952)[0]	(0.0077)[0]	(0.0096)[0]
lnM	-1.9267	-1.4839	-4.7088*	-5.2933*
	(0.3154)[0]	(0.8080)[0]	(0.0010)[0]	(0.0014)[0]
lnS	-1.6482	-2.3782	-3.8954*	-4.3722**
	(0.4442)[0]	(0.3809)[0]	(0.0073)[1]	(0.0110)[1]
lnMCONS	-0.8510	-1.7704	-4.6626*	-4.5940*
	(0.7866)[0]	(0.6885)[0]	(0.0012)[0]	(0.0065)[0]
lnMINT	-0.5810	-1.7397	-4.4303*	-4.3340**
	(0.8580)[0]	(0.7029)[0]	(0.0020)[0]	(0.0114)[0]
lnMCAP	-2.6380***	-1.5978	-3.8752*	-4.6196*
	(0.0990)[0]	(0.7648)[0]	(0.0073)[0]	(0.0061)[0]
lnXCONS	-0.5236	-1.6935	-4.1005*	-3.9393**
	(0.8706)[0]	(0.7239)[0]	(0.0044)[0]	(0.0260)[0]
lnXINT	-0.7960	-1.9761	-3.4391**	-3.4507**
	(0.8029)[0]	(0.5843)[1]	(0.0194)[0]	(0.0682)[0]
lnXCAP	-3.0604**	-1.4281	-3.3961**	-4.4225*
	(0.0429)[0]	(0.8269)[0]	(0.0214)[0]	(0.0094)[0]

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

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Table 4.2E

Thailand: ADF Test for Unit Root

	Level		1st Difference	
	Constant	Constant +Trend	Constant	Constant +Trend
lnPvC	-1.8271	-3.4351***	-3.1070**	-3.2014
	(0.3594)[0]	(0.0702)[1]	(0.0395)[0]	(0.1077)[0]
lnPuC	-0.8190	-3.7826**	-4.1948*	-4.1541**
	(0.7962)[0]	(0.0375)[3]	(0.0035)[0]	(0.0166)[0]
lnGFCF	-2.4153	-2.5004	-3.0098**	-2.9625
	(0.1483)[1]	(0.3249)[1]	(0.0482)[0]	(0.1623)[0]
lnX	-2.5661	-1.7639	-4.7775*	-5.5838*
	(0.1131)[0]	(0.6916)[0]	(0.0009)[0]	(0.0007)[0]
lnM	-1.3873	-2.3711	-4.3356*	-4.3102**
	(0.5721)[0]	(0.3842)[0]	(0.0025)[0]	(0.0120)[0]
lnS	-0.9245	-3.5580***	-2.8621***	-3.0221*
	(0.7632)[0]	(0.0555)[1]	(0.0648)[0]	(0.1478)[1]
lnMCONS	-0.7446	-2.1265	-3.9831*	-3.8883**
	(0.8173)[0]	(0.5071)[0]	(0.0057)[0]	(0.0288)[0]
lnMINT	-1.0984	-2.4179	-5.3091*	-5.2003*
	(0.7000)[0]	(0.3622)[0]	(0.0003)[0]	(0.0017)[0]
lnMCAP	-1.4507	-3.8539**	-3.9933*	-3.9984**
	(0.5413)[0]	(0.0309)[1]	(0.0056)[0]	(0.0230)[0]
lnXCONS	-1.4941	-2.4827	-6.2192*	-6.3208*
	(0.5200)[0]	(0.3328)[0]	(0.0000)[0]	(0.0001)[0]
lnXINT	-1.9981	0.2338	-3.4298**	-3.9959**
	(0.2857)[0]	(0.9969)[0]	(0.0198)[0]	(0.0231)[0]
lnXCAP	-4.6056*	-1.8139	-3.5846**	-5.3399*
	(0.0013)[0]	(0.6675)[0]	(0.0141)[0]	(0.0013)[0]

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

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Table 4.2F
Indonesia: PP Test for Unit Root

	Level		1st Difference	
	Constant	Constant +Trend	Constant	Constant +Trend
lnPvC	-1.2906	-2.3273	-4.0793*	-4.0775**
	(0.6176)[2]	(0.4054)[2]	(0.0046)[2]	(0.0195)[2]
lnPuC	0.6043	-1.4149	-3.3751**	-3.5724***
	(0.9869)[1]	(0.8311)[1]	(0.0224)[0]	(0.0540)[1]
lnGFCF	-0.6509	-1.5887	-3.3685**	-3.3167***
	(0.8415)[1]	(0.7685)[0]	(0.0227)[6]	(0.0875)[6]
lnX	-1.3998	-3.0016	-6.6082*	-6.4866*
	(0.5661)[2]	(0.1514)[1]	(0.0000)[2]	(0.0001)[2]
lnM	-1.3564	-2.3927	-4.8741*	-4.7701*
	(0.5868)[2]	(0.3740)[0]	(0.0007)[3]	(0.0044)[3]
lnS	-0.0104	-1.5294	-4.4500*	-4.4518*
	(0.9490)[2]	(0.7915)[2]	(0.0019)[1]	(0.0088)[0]
lnMCONS	-0.5523	-2.4545	-5.1776*	-5.0627*
	(0.8644)[2]	(0.3455)[1]	(0.0003)[1]	(0.0023)[1]
lnMINT	-0.5606	-1.8905	-5.9404*	-5.8462*
	(0.8626)[4]	(0.6293)[1]	(0.0001)[3]	(0.0004)[4]
lnMCAP	-1.0576	-1.7090	-5.2171*	-5.2201*
	(0.7159)[2]	(0.7170)[1]	(0.0003)[3]	(0.0016)[4]
lnXCONS	-0.3374	-2.6188	-5.4692*	-5.4398*
	(0.9056)[1]	(0.2756)[1]	(0.0002)[3]	(0.0010)[4]
lnXINT	-1.0059	-2.6077	-5.2036*	-5.0045*
	(0.7351)[0]	(0.2801)[1]	(0.0003)[1]	(0.0027)[1]
lnXCAP	-9.2810*	-6.2194*	-4.2601*	-5.5208*
	(0.0000)[1]	(0.0002)[1]	(0.0030)[3]	(0.0008)[2]

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.2G

Malaysia: PP Test for Unit Root

	Level		1st Difference	
	Constant	Constant +Trend	Constant	Constant +Trend
lnPvC	0.1526	-1.9591	-3.9647*	-3.9690**
	(0.9635)[3]	(0.5943)[1]	(0.0060)[6]	(0.0244)[6]
lnPuC	-0.3814	-2.4808	-6.4252*	-6.3005*
	(0.8981)[2]	(0.3337)[3]	(0.0000)[2]	(0.0002)[2]
lnGFCF	-1.5365	-2.2164	-4.1915*	-4.0618**
	(0.4991)[0]	(0.4608)[0]	(0.0035)[4]	(0.0202)[4]
lnX	-10.4717*	-1.8442	-3.6563**	-5.8561
	(0.0000)[10]	(0.6526)[8]	(0.0120)[1]	(0.0004)[7]
lnM	-3.2027**	-2.8622	-4.7990*	-5.3036*
	(0.0318)[5]	(0.1904)[4]	(0.0008)[2]	(0.0014)[4]
lnS	-2.0633	-3.4268***	-3.6081**	-3.6679**
	(0.2600)[2]	(0.0704)[0]	(0.0134)[3]	(0.0448)[2]
lnMCONS	0.1469	-2.1441	-5.6455*	-6.0399*
	(0.9630)[4]	(0.4980)[0]	(0.0001)[3]	(0.0003)[4]
lnMINT	-0.5699	-2.7625	-6.0586*	-5.9221*
	(0.8605)[6]	(0.2226)[1]	(0.0000)[5]	(0.0003)[5]
lnMCAP	-6.6182*	-4.0165**	-4.7770*	-5.7175*
	(0.0000)[15]	(0.0215)[9]	(0.0009)[2]	(0.0005)[5]
lnXCONS	-2.2459	-2.8530	-4.9260*	-5.1800*
	(0.1962)[5]	(0.1932)[2]	(0.0006)[4]	(0.0018)[4]
lnXINT	-1.3169	-2.5437	-4.5256*	-4.6269*
	(0.6054)[3]	(0.3064)[1]	(0.0016)[2]	(0.0061)[2]
lnXCAP	-11.189*	-3.6053**	-3.9059*	-4.5537*
	(0.0000)[16]	(0.0498)[11]	(0.0068)[2]	(0.0071)[5]

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.2H

Philippines: PP Test for Unit Root

	Level		1st Difference	
	Constant	Constant +Trend	Constant	Constant +Trend
lnPvC	0.9636	-1.3443	-2.1320	-2.3500
	(0.9941)[1]	(0.8438)[1]	(0.2355)[2]	(0.3897)[2]
lnPuC	1.9240	-0.7523	-3.0581**	-5.4346*
	(0.9995)[2]	(0.9527)[18]	(0.0484)[0]	(0.0020)[7]
lnGFCF	4.4960	0.7943	-4.7241*	-12.3846*
	(1.0000)[11]	(0.9993)[18]	(0.0017)[1]	(0.0000)[8]
lnX	0.4646	-3.7343**	-7.0877*	-7.4845*
	(0.9804)[17]	(0.0448)[3]	(0.0000)[4]	(0.0001)[5]
lnM	1.5866	-2.8958	-6.0142*	-6.5713*
	(0.9988)[8]	(0.1851)[1]	(0.0001)[1]	(0.0000)[1]
lnS	2.3542	-1.7531	-3.0335**	-4.1166**
	(0.9999)[0]	(0.6867)[1]	(0.0506)[0]	(0.0232)[0]
lnMCONS	0.4086	-3.6966**	-4.7021*	-4.6879*
	(0.9777)[2]	(0.0480)[1]	(0.0018)[1]	(0.0080)[1]
lnMINT	0.0662	-2.9150	-4.6591*	-5.1610*
	(0.9539)[4]	(0.1797)[4]	(0.0020)[5]	(0.0034)[5]
lnMCAP	-2.2669	-2.2179	-6.0021*	-5.7914*
	(0.1916)[2]	(0.4540)[2]	(0.0001)[2]	(0.0011)[2]
lnXCONS	-0.2167	-2.1357	-2.9519**	-2.7814
	(0.9207)[0]	(0.4951)[0]	(0.0590)[3]	(0.2205)[3]
lnXINT	-0.5748	-2.5898	-4.1514*	-4.0841**
	(0.8546)[0]	(0.2877)[2]	(0.0055)[1]	(0.0246)[1]
lnXCAP	-3.1996**	-2.8737	-3.3599**	-3.1699
	(0.0360)[1]	(0.1914)[1]	(0.0270)[0]	(0.1212)[0]

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.2I

Singapore: PP Test for Unit Root

	Level		1st Difference	
	Constant	Constant +Trend	Constant	Constant +Trend
lnPvC	-7.5181*	-0.9469	-3.8921*	-7.9927*
	(0.0000)[21]	(0.9339)[9]	(0.0070)[5]	(0.0000)[17]
lnPuC	-2.6045	-0.7057	-5.1938*	-6.2092*
	(0.1054)[5]	(0.9615)[3]	(0.0003)[0]	(0.0002)[3]
lnGFCF	-1.8466	-2.1294	-2.9498***	-3.0118
	(0.3506)[1]	(0.5056)[1]	(0.0544)[5]	(0.1495)[4]
lnX	-2.1667	-1.2637	-3.8510*	-4.3952*
	(0.2224)[2]	(0.8736)[1]	(0.0077)[0]	(0.0100)[2]
lnM	-2.2165	-1.4503	-4.7088*	-5.3385*
	(0.2057)[3]	(0.8196)[1]	(0.0010)[0]	(0.0013)[2]
lnS	-2.6711***	-2.0788	-4.5509*	-4.9571*
	(0.0930)[10]	(0.5320)[6]	(0.0015)[4]	(0.0029)[6]
lnMCONS	-0.8544	-1.7704	-4.6605*	-4.5885*
	(0.7856)[2]	(0.6885)[0]	(0.0012)[1]	(0.0066)[1]
lnMINT	-0.6016	-1.9803	-4.4298*	-4.3325**
	(0.8533)[1]	(0.5833)[2]	(0.0020)[1]	(0.0114)[1]
lnMCAP	-2.9033***	-1.5687	-3.8752*	-4.6088*
	(0.0591)[3]	(0.7764)[2]	(0.0073)[0]	(0.0063)[2]
lnXCONS	-0.5236	-1.7819	-4.1005*	-3.9393**
	(0.8706)[0]	(0.6830)[1]	(0.0044)[0]	(0.0260)[0]
lnXINT	-0.7861	-1.6939	-3.4391**	-3.4507***
	(0.8058)[1]	(0.7237)[2]	(0.0194)[0]	(0.0682)[0]
lnXCAP	-3.3238**	-1.4162	-3.3961**	-4.4089*
	(0.0245)[3]	(0.8307)[2]	(0.0214)[0]	(0.0097)[2]

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

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Table 4.2J

Thailand: PP Test for Unit Root

	Level		1st Difference	
	Constant	Constant +Trend	Constant	Constant +Trend
lnPvC	-1.6829	-2.2506	-3.1070**	-3.2014
	(0.4273)[1]	(0.4434)[1]	(0.0395)[0]	(0.1077)[0]
lnPuC	-0.7542	-1.8753	-4.2684*	-4.2366**
	(0.8147)[2]	(0.6370)[2]	(0.0029)[2]	(0.0140)[2]
lnGFCF	-1.8056	-1.8399	-3.0202**	-2.9634
	(0.3692)[2]	(0.6548)[2]	(0.0472)[2]	(0.1621)[2]
lnX	-4.186*	-1.5479	-4.7814*	-7.0895*
	(0.0034)[7]	(0.7845)[3]	(0.0009)[2]	(0.0000)[6]
lnM	-1.3876	-2.3711	-4.3051*	-4.2730**
	(0.5719)[2]	(0.3842)[0]	(0.0027)[3]	(0.0129)[3]
lnS	-0.8773	-2.3749	-2.8782***	-2.8317
	(0.7784)[2]	(0.3824)[2]	(0.0628)[2]	(0.2004)[2]
lnMCONS	-0.7604	-2.4013	-3.9831**	-3.8883**
	(0.8130)[1]	(0.3700)[2]	(0.0057)[0]	(0.0288)[0]
lnMINT	-1.0193	-2.4884	-5.5316*	-5.3848*
	(0.7302)[4]	(0.3303)[1]	(0.0001)[4]	(0.0011)[4]
lnMCAP	-1.4493	-2.6981	-3.9716*	-3.9701**
	(0.5420)[2]	(0.2454)[1]	(0.0059)[2]	(0.0244)[2]
lnXCONS	-1.7627	-2.4827	-6.4009*	-6.6563*
	(0.3892)[6]	(0.3328)[0]	(0.0000)[3]	(0.0001)[4]
lnXINT	-1.9878	0.7130	-3.3998**	-3.8860**
	(0.2899)[2]	(0.9993)[5]	(0.0212)[3]	(0.0290)[6]
lnXCAP	-10.337*	-2.4704	-3.5337**	-5.9036*
	(0.0000)[8]	(0.3383)[7]	(0.0158)[1]	(0.0004)[4]

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Appendix B-2

Table 4.3A

Indonesia: Serial Correlation

	MCAP, MINT & MCONS		*XCAP,XINT & XCONS*	
	Coeff	Prob.	Coeff	Prob.
PvC	2.0528	0.1747	0.4096	0.6722
PuC	0.6961	0.5305	6.1623	0.1206
GFCF	1.0693	0.3716	3.7439	0.2108
X	2.5272	0.1214	1.4801	0.2914
S	0.8032	0.4776	0.6445	0.5851

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3B

Malaysia: Serial Correlation

	MCAP, MINT & MCONS		*XCAP,XINT & XCONS*	
	Coeff	Prob.	Coeff	Prob.
PvC	0.1929	0.8271	0.3023	0.7432
PuC	2.0667	0.2217	0.4079	0.6781
GFCF	0.5337	0.5959	2.4892	0.1526
X	1.1763	0.3965	2.5413	0.2261
S	1.4836	0.2547	0.6696	0.5989

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3C

Philippines: Serial Correlation

	MCAP, MINT & MCONS		*XCAP,XINT & XCONS*	
	Coeff	Prob.	Coeff	Prob.
PvC	2.7938	0.1533	2.4638	0.1467
PuC	4.8391	0.0419**	0.1671	0.8658
GFCF	2.3226	0.1602	3.3486	0.1154
X	1.2467	0.3251	0.2836	0.7584
S	3.2139	0.1795	3.7091	0.1545

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3D

Singapore: Serial Correlation

	MCAP, MINT & MCONS		*XCAP,XINT & XCONS*	
	Coeff	Prob.	Coeff	Prob.
PvC	0.1289	0.8812	1.2199	0.3357
PuC	1.2137	0.4517	0.4828	0.6585
GFCF	2.0087	0.4464	0.8964	0.4265
X	1.8515	0.2502	0.4472	0.6489
S	1.0763	0.3773	1.8025	0.2068

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3E

Thailand: Serial Correlation

	MCAP, MINT & MCONS		*XCAP,XINT & XCONS*	
	Coeff	Prob.	Coeff	Prob.
PvC	1.2111	0.3422	0.9782	0.4043
PuC	1.8747	0.8471	6.1623	0.1206
GFCF	0.6857	0.5189	2.5287	0.1181
X	3.7765	0.1519	1.4916	0.2531
S	1.3497	0.2991	1.3191	0.3035

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3F

Indonesia: Homoscedasticity

	MCAP, MINT & MCONS		*XCAP,XINT & XCONS*	
	Coeff	Prob.	Coeff	Prob.
PvC	1.6623	0.1995	1.0248	0.4648
PuC	0.8304	0.6313	0.6275	0.7742
GFCF	1.2884	0.3202	2.6497	0.1782
X	0.7838	0.6354	0.7346	0.7082
S	0.3382	0.9427	0.3945	0.9313

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3G

Malaysia: Homoscedasticity

	MCAP, MINT & MCONS		*XCAP,XINT & XCONS*	
	Coeff	Prob.	Coeff	Prob.
PvC	0.4424	0.8759	1.336	0.2917
PuC	1.0443	0.5057	0.2843	0.9815
GFCF	0.6637	0.6554	0.5776	0.8216
X	0.7919	0.6727	0.3848	0.9367
S	1.8292	0.1552	0.2282	0.9880

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3H

Philippines: Homoscedasticity

	MCAP, MINT & MCONS		*XCAP,XINT & XCONS*	
	Coeff	Prob.	Coeff	Prob.
PVC	0.5734	0.7951	2.0177	0.1478
PUC	1.1087	0.4305	2.4653	0.2485
GFCF	0.9884	0.4967	1.2914	0.3537
X	1.5685	0.2370	0.9522	0.4807
S	0.7689	0.6559	1.8227	0.2634

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3I

Singapore: Homoscedasticity

	MCAP, MINT & MCONS		*XCAP,XINT & XCONS*	
	Coeff	Prob.	Coeff	Prob.
PvC	0.7237	0.6144	0.3302	0.9556
PuC	1.4967	0.3776	0.5009	0.8691
GFCF	0.3141	0.9511	1.2378	0.3305
X	0.5394	0.8506	0.9047	0.5378
S	0.8043	0.6299	0.8407	0.5834

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3J

Thailand: Homoscedasticity

	MCAP, MINT & MCONS		*XCAP,XINT & XCONS*	
	Coeff	Prob.	Coeff	Prob.
PvC	1.7351	0.1923	3.3855	0.1204
PuC	0.3401	0.9569	0.6275	0.7746
GFCF	1.6202	0.2023	1.6111	0.2071
X	1.1236	0.4894	1.9544	0.1323
S	0.2334	0.9773	2.9119	0.1386

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3K

Indonesia: Stability Test

	MCAP, MINT & MCONS		*XCAP,XINT & XCONS*	
	Coeff	Prob.	Coeff	Prob.
PvC	0.5916	0.4567	0.4331	0.5212
PuC	0.0047*	0.9468	0.0306	0.8646
GFCF	0.0532**	0.8209	1.2053	0.3525
X	1.7835	0.2046	2.3996	0.1645
S	1.4321	0.2593	0.1149	0.7517

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3L

Malaysia: Stability Test

	MCAP, MINT & MCONS		*XCAP,XINT & XCONS*	
	Coeff	Prob.	Coeff	Prob.
PvC	0.1397	0.7147	7.1598	0.0154*
PuC	0.0069	0.9364	0.0436	0.8393
GFCF	0.0637	0.8036	0.0157	0.9035
X	4.4444	0.0888***	0.6138	0.4771
S	0.8763	0.3617	10.2448	0.0493

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3M

Philippines: Stability Test

	MCAP, MINT & MCONS		*XCAP,XINT & XCONS*	
	Coeff	Prob.	Coeff	Prob.
PvC	0.1539	0.7084	0.2785	0.6104
PuC	0.2381	0.6372	0.0117	0.9236
GFCF	0.8541	0.3795	0.4368	0.5272
X	0.2229	0.6453	0.3969	0.5405
S	0.7299	0.4411	0.0064	0.9403

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3N

Singapore: Stability Test

	MCAP, MINT & MCONS		XCAP,XINT & XCONS	
	Coeff	Prob.	Coeff	Prob.
PvC	0.7614	0.3944	0.4314	0.5248
PuC	0.0515	0.8351	0.2614	0.6361
GFCF	0.2309	0.6783	1.5271	0.2325
X	0.4744	0.5167	1.3581	0.2647
S	1.6727	0.2224	5.6621	0.0333**

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3O

Thailand: Stability Test

	MCAP, MINT & MCONS		*XCAP,XINT & XCONS*	
	Coeff	Prob.	Coeff	Prob.
PvC	3.0712	0.1102	0.0414	0.8428
PuC	0.0043	0.9513	0.0306	0.8646
GFCF	1.1666	0.2961	0.1161	0.7383
X	0.0011	0.9752	1.5123	0.2346
S	3.0081	0.1084	0.0478	0.8304

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3P
Lag Length for Import Components Model

Imports	Indonesia	Malaysia	Philippines	Singapore	Thailand
PvC	4,0,0,0,0	3,0,0,0,1	1,0,2,1,2	1,0,0,0,0	5,0,0,0,0
PuC	1,2,0,3,3	3,2,2,2,2	1,1,0,1,1	3,3,2,3,3	1,3,3,3,3
GFCF	3,0,0,0,0	1,0,0,0,0	2,0,0,0,2	4,3,2,3,2	2,0,0,0,0
X	1,1,1,0,2	3,1,2,3,3	1,0,0,0,0	3,2,2,2,2	4,2,2,2,2
S	5,0,0,0,0	1,0,0,0,0	5,0,0,0,0	3,0,1,2,0	4,0,0,0,0

Source: Author

Table 4.3Q
Lag Length for Export Component Models

Exports	Indonesia	Malaysia	Philippines	Singapore	Thailand
PvC	1,1,1,1,1	1,0,0,0,0	1,1,1,0,1	3,1,0,0,2	2,1,2,0,0
PuC	3,0,3,0,1	1,2,2,2,2	3,2,1,1,2	1,3,3,3,3	3,0,3,0,1
GFCF	3,2,3,3,3	3,2,1,1,2	2,0,0,0,2	1,0,0,0,0	3,0,0,0,0
X	2,2,2,2,2	2,2,3,3,3	1,0,0,0,0	1,0,0,2,1	1,0,0,0,0
S	1,3,3,3,3	2,3,3,3,3	5,0,0,0,0	3,1,0,0,0	3,0,0,0,0

Source: Author

Appendix B-3

Table 4.4
Result of Zivot-Andrews one-break test based on level and trend

Variables	Indonesia	Malaysia	Philippines	Thailand	Singapore
	Break Year	Break Year	Break Year	Break Year	Break Year
PvC	1998	1998	2009	2003	2000
PuC	1998	1998	2011	2009	2000
GFCF	1998	1998	2009	1998	2012
X	1999	1998	2009	2009	2004
M	1999	1998	2009	2004	2006
S	1998	2003	2009	1997	2010

Source: Author

Appendix B-4

Table 4.5.1A
Indonesia: ARDL Bound Test

Model (Import Components)	F-Statistics
PvC,MCAP,MINT,MCONS	1.6412
PuC,MCAP,MINT,MCONS	7.7351*
GFCF,MCAP,MINT,MCONS	0.4462
X,MCAP,MINT,MCONS	2.7183
S,MCAP,MINT,MCONS	0.8510
Model (Export Components)	F-Statistics
PvC,XCAP,XINT,XCONS	5.8102*
PuC,XCAP,XINT,XCONS	10.725*
GFCF,XCAP,XINT,XCONS	7.5861*
M,XCAP,XINT,XCONS	2.1830
S,XCAP,XINT,XCONS	15.8649*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.5.1B
Indonesia: Private Consumption, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (4,0,0,0,0)	*D(PvC(-1))*	0.1098	0.3311
	D(PvC(-2))	0.3162	0.0009*
	D(PvC(-3))	0.0414	0.5427
	D(MCAP)	-0.0121	0.6096
	D(MINT)	0.0622	0.0944***
	D(MCONS)	-0.0084	0.6096
	D(SPvC)	-0.1448	0.0001*
	CointEq(-1)	-0.0689	0.0498**
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	-0.1743	0.6110
	MINT	0.8992	0.0859***
	MCONS	-0.1219	0.6669
	SPvC	-2.1018	0.0631***
	C	4.1396	0.0002*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.5.1C

Indonesia: Public Consumption, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (1,2,0,3,3)	*D(MCAP)*	-0.0636	0.3947
	D(MCAP(-1))	0.1316	0.0282**
	D(MINT)	0.0518	0.6561
	D(MCONS)	-0.0757	0.2598
	D(MCONS(-1))	0.0099	0.8390
	D(MCONS(-2))	-0.1147	0.0108*
	D(SPuC)	-0.2413	0.0001*
	D(SPuC(-1))	-0.0265	0.6607
	D(SPuC(-2))	0.1532	0.0052*
	CointEq(-1)	-0.2026	0.0829***
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	-0.4755	0.2947
	MINT	0.2555	0.6663
	MCONS	0.5847	0.0131**
	SPuC	-2.5653	0.0181**
	C	3.2841	0.0009*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.5.1D

Indonesia: Gross Fixed Capital Formation, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (3,0,0,0,0)	*D(GFCF(-1))*	0.2977	0.0047*
	D(GFCF(-2))	-0.0422	0.7145
	D(MCAP)	0.0525	0.5542
	D(MINT)	0.2164	0.2525
	D(MCONS)	0.0398	0.4544
	D(SGFCF)	-0.3978	0.0000*
	CointEq(-1)	-0.4342	0.0022*
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	0.1212	0.5694
	MINT	0.4982	0.2046
	MCONS	0.0916	0.4407
	SGFCF	-0.9163	0.0092*
	C	2.8972	0.0002*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.5.1E

Indonesia: Exports, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (1,1,1,0,2)	*D(MCAP)*	-0.1423	0.0584**
	D(MINT)	0.1132	0.2731
	D(MCONS)	0.3525	0.0003*
	D(SX)	-0.3213	0.0001*
	D(SX(-1))	-0.0749	0.0404**
	CointEq(-1)	-0.485	0.0007*
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	0.2994	0.0906***
	MINT	-0.6457	0.0918***
	MCONS	0.7268	0.0003*
	SX	-0.2503	0.1468
	C	3.9378	0.0001*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.5.1F

Indonesia: Services, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (5,0,0,0,0)	*D(S(-1))*	0.3033	0.0011*
	D(S(-2))	0.0316	0.4680
	D(S(-3))	0.0251	0.6003
	D(S(-4))	0.0184	0.6965
	D(MCAP)	-0.0174	0.5307
	D(MINT)	0.0247	0.5957
	D(MCONS)	0.0332	0.1012***
	D(SS)	-0.2379	0.0004*
	CointEq(-1)	-0.0703	0.0541**
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	-0.2469	0.5595
	MINT	0.3518	0.5928
	MCONS	0.4715	0.0399**
	SS	-3.3828	0.0576**
	C	4.1706	0.0001*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.5.1G

Indonesia: Private Consumption, Exports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (1,1,1,1,1)	*D(XCAP)*	-0.0736	0.0674**
	D(XINT)	-0.0321	0.6544
	D(XCONS)	0.0843	0.3972
	D(SPvC)	-0.0995	0.0012*
	CointEq(-1)	-0.1572	0.0885***
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	-0.0909	0.5025
	XINT	0.2411	0.3990
	XCONS	0.5072	-0.1001***
	SPvC	-0.9312	0.1304
	C	3.6792	0.0003*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.5.1H

Indonesia: Public Consumption, Exports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (3,0,3,0,1)	*D(PuC(-1))*	0.0512	0.7762
	D(PuC(-2))	0.5685	0.0058*
	D(XCAP)	0.0413	0.1128
	D(XINT)	-0.3061	0.0012*
	D(XINT(-1))	-0.2187	0.0245**
	D(XINT(-2))	0.1761	0.0033*
	D(XCONS)	0.2027	0.0431**
	D(SPuC)	-0.1665	0.0001*
	CointEq(-1)	-0.3133	0.0133*
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	0.1313	0.2767
	XINT	0.1681	0.3504
	XCONS	0.6469	0.0019*
	SPuC	-1.0019	0.0247**
	C	0.6519	0.0318**

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.5.1I

Indonesia: Gross Fixed Capital Formation, Exports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (3,2,3,3,3)	*D(GFCF(-1))*	-0.4298	0.2074
	D(GFCF(-2))	-0.6112	0.0383**
	D(XCAP)	0.1173	0.3884
	D(XCAP(-1))	-0.3386	0.0195**
	D(XINT)	-0.0173	0.8972
	D(XINT(-1))	-0.0167	0.9249
	D(XINT(-2))	0.2946	0.1216
	D(XCONS)	0.0956	0.5738
	D(XCONS(-1))	-0.2573	0.2596
	D(XCONS(-2))	0.2543	0.1664
	D(SGFCF)	-0.7397	0.0005*
	D(SGFCF(-1))	0.4133	0.0393**
	D(SGFCF(-2))	-0.3107	0.0547**
	CointEq(-1)	-0.5663	0.0363**
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	-0.0408	0.6771
	XINT	0.2195	0.2511
	XCONS	1.0371	0.0115**
	SGFCF	2.0197	0.0185*
	C	0.4523	0.2581

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.5.1J

Indonesia: Imports, Exports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (2,2,2,2,2)	*D(M(-1))*	0.3683	0.4513
	D(XCAP)	-0.6079	0.1013***
	D(XCAP(-1))	-0.0572	0.8132
	D(XINT)	0.3036	0.3929
	D(XINT(-1))	-0.4739	0.2562
	D(XCONS)	0.5621	0.1521
	D(XCONS(-1))	0.4843	0.3822
	D(SM)	-0.5227	0.0343**
	D(SM(-1))	0.2004	0.2675
	CointEq(-1)	-0.4289	0.1425
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	-0.1953	0.5697
	XINT	0.8844	0.1316
	XCONS	-0.2473	0.8029
	SM	-0.8025	0.5139
	C	3.3008	0.1385

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.5.1K

Indonesia: Imports, Services & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (1,3,3,3,3)	*D(XCAP)*	0.0181	0.8427
	D(XCAP(-1))	0.1517	0.0461**
	D(XCAP(-2))	-0.0429	0.3376
	D(XINT)	0.1008	0.2661
	D(XINT(-1))	-0.1321	0.3616
	D(XINT(-2))	-0.2408	0.0709***
	D(XCONS)	0.1711	0.2291
	D(XCONS(-1))	0.1285	0.3976
	D(XCONS(-2))	0.0569	0.6001
	D(SS)	-0.2024	0.0017*
	D(SS(-1))	0.1062	0.1127
	D(SS(-2))	0.2337	0.0234**
	CointEq(-1)	-0.6261	0.0205**
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	-0.0031	0.9665
	XINT	0.6145	0.0035*
	XCONS	0.3474	0.0906***
	SS	-1.1101	0.0033*
	C	2.1351	0.0001*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Appendix B-5

Table 4.6.1A

Malaysia: ARDL Bound Test for Cointegration

Model (Import Components)	F-Statistics
PvC,MCAP,MINT,MCONS	3.7511**
PuC,MCAP,MINT,MCONS	2.1765
GFCF,MCAP,MINT,MCONS	1.9655
X,MCAP,MINT,MCONS	7.2813*
S,MCAP,MINT,MCONS	2.1143
Model (Export Components)	F-Statistics
PvC,XCAP,XINT,XCONS	1.1552
PuC,XCAP,XINT,XCONS	0.2979
GFCF,XCAP,XINT,XCONS	2.3837
M,XCAP,XINT,XCONS	3.5510**
S,XCAP,XINT,XCONS	2.2691
1% (LB:3.29;UB:4.39); 10%(LB2.20;UB3.09)	5%(LB:2.56;UB3.49);

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.6.1B

Malaysia: Private Consumption, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (3,0,0,0,1)	*D(PvC(-1))*	-0.1433	0.2593
	D(PvC(-2))	-0.1624	0.0468**
	D(MCAP)	0.0376	0.1374
	D(MINT)	0.1003	0.0726***
	D(MCONS)	0.0899	0.0749***
	D(SPvC)	-0.1071	0.0001*
	CointEq(-1)	-0.2562	0.0001*
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	0.1468	0.1159
	MINT	0.3917	0.0913***
	MCONS	0.3511	0.0337**
	SPvC	-0.6416	0.0111**
	C	1.8577	0.0001*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.6.1C

Malaysia: Public Consumption, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (3,2,2,2,2)	*D(PuC(-1))*	-0.1397	0.7392
	D(PuC(-2))	-0.9421	0.0417**
	D(MCAP)	-0.2733	0.0345**
	D(MCAP(-1))	0.1581	0.2376
	D(MINT)	-0.0441	0.8119
	D(MINT(-1))	-0.3372	0.1072
	D(MCONS)	-0.0651	0.6996
	D(MCONS(-1))	0.4387	0.0428**
	D(SPuC)	-0.2762	0.0023*
	D(SPUC(-1))	0.1582	0.0414**
	CointEq(-1)	0.3464	0.0608***
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	0.1584	0.3432
	MINT	0.7362	0.2222
	MCONS	0.2817	0.4371
	SPuC	0.9956	0.0551**
	C	-1.1248	0.1416

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.6.1D

Malaysia: Gross Fixed Capital Formation, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (1,0,0,0,0)	*D(MCAP)*	-0.1314	0.1531
	D(MINT)	0.1281	0.6186
	D(MCONS)	0.0033	0.9854
	D(SGFCF)	-0.5654	0.0010*
	CointEq(-1)	-0.1164	0.2964
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	-1.1291	0.4136
	MINT	1.1001	0.6379
	MCONS	0.0284	0.9849
	SGFCF	-4.8574	0.3577
	C	5.4813	0.1744

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.6.1E

Malaysia: Exports, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (3,1,2,3,3)	*D(X(-1))*	-0.1736	0.3297
	D(X(-2))	-0.3372	0.1909
	D(MCAP)	0.1651	0.0284**
	D(MINT)	0.2983	0.0153**
	D(MINT(-1))	0.2208	0.0415**
	D(MCONS)	0.0292	0.7686
	D(MCONS(-1))	-0.2787	0.0512**
	D(MCONS(-2))	0.2017	0.2363
	D(SX)	0.0728	0.0397**
	D(SX(-1))	-0.0836	0.1325
	D(SX(-2))	0.0438	0.1074***
	CointEq(-1)	-0.2956	0.0075*
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	0.7395	0.0004*
	MINT	0.0147	0.9736
	MCONS	-0.0424	0.9056
	SX	0.5556	0.0676**
	C	2.2068	0.0041*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.6.1F

Malaysia: Services, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (1,0,0,0,0)	*D(MCAP)*	0.0031	0.9501
	D(MINT)	0.1301	0.2191
	D(MCONS)	0.0769	0.3361
	D(SS)	0.0162	0.6272
	CointEq(-1)	-0.2448	0.0004*
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	0.0126	0.9496
	MINT	0.5317	0.2568
	MCONS	0.3141	0.2909
	SS	0.0661	0.6265
	C	1.9978	0.0004*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.6.1G

Malaysia: Private Consumption, Exports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (1,0,0,0,0)	*D(XCAP)*	-0.0358	0.0663***
	D(XINT)	0.1237	0.0839***
	D(XCONS)	0.1359	0.0843***
	D(SPvC)	-0.1448	0.0003*
	CointEq(-1)	-0.2843	0.0009*
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	-0.1258	0.0436**
	XINT	0.4358	0.0689***
	XCONS	0.4783	0.0421**
	SPvC	-0.5092	0.0092*
	C	2.0587	0.0010*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.6.1H

Malaysia: Public Consumption, Exports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (1,2,2,2,2)	*D(XCAP)*	0.0183	0.8032
	D(XCAP(-1))	-0.1113	0.1514
	D(XINT)	0.0351	0.8453
	D(XINT(-1))	0.3844	0.0144
	D(XCONS)	0.2926	0.1043***
	D(XCONS(-1))	-0.2153	0.1093
	D(SPuC)	-0.1578	0.0010*
	D(SPuC(-1))	0.1249	0.0132**
	CointEq(-1)	-0.2412	0.2238
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	0.1678	0.4069
	XINT	-1.7426	0.2834
	XCONS	2.4353	0.1071
	SPuC	-0.9761	0.1645
	C	-0.894	0.3073

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.6.1I

Malaysia*: Gross Fixed Capital Formation, Exports & Structural Break*

Cointegrating Form	Variable	Coefficient	Prob.
Model (3,2,1,1,2)	*D(GFCF(-1))*	-0.0047	0.9856
	D(GFCF(-2))	0.3592	0.0871***
	D(XCAP)	0.0922	0.3914
	D(XCAP(-1))	0.3139	0.0306**
	D(XINT)	-0.2654	0.3035
	D(XCONS)	0.3215	0.1325
	D(SGFCF)	-0.6133	0.0002*
	D(SGFCF(-1))	-0.3585	0.0287**
	CointEq(-1)	-0.1301	0.2017
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	-0.5932	0.3747
	XINT	1.5902	0.4201
	XCONS	-0.3891	0.8111
	SGFCF	-3.1496	0.4647
	C	2.9556	0.1579

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.6.1J

Malaysia: Imports, Exports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (2,2,3,3,3)	*D(M(-1))*	-0.6641	0.1106
	D(XCAP)	0.0437	0.5641
	D(XCAP(-1))	0.5928	0.0413**
	D(XINT)	-0.2363	0.4934
	D(XINT(-1))	-0.7562	0.0363**
	D(XINT(-2))	0.4044	0.0636**
	D(XCONS)	-0.0521	0.8242
	D(XCONS(-1))	1.1809	0.0445**
	D(XCONS(-2))	-0.4714	0.1135
	D(SM)	-0.3236	0.0054*
	D(SM(-1))	-0.0521	0.4312
	D(SM(-2))	0.1505	0.0629***
	CointEq(-1)	-0.7571	0.0685***
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	0.2731	0.0022*
	XINT	0.5434	0.0858***
	XCONS	-0.0211	0.9346
	SM	-1.0111	0.0264**
	C	2.2507	0.0001*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.6.1K

Malaysia: Services, Exports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (2,3,3,3,3)	*D(S(-1))*	0.3939	0.0757***
	D(XCAP)	-0.0096	0.8355
	D(XCAP(-1))	-0.1534	0.0862***
	D(XCAP(-2))	0.1436	0.0985***
	D(XINT)	0.5944	0.0024*
	D(XINT(-1))	-0.3613	0.0813***
	D(XINT(-2))	0.1205	0.2405
	D(XCONS)	-0.1029	0.3193
	D(XCONS(-1))	-0.2466	0.0948***
	D(XCONS(-2))	-0.1103	0.4004
	D(SS)	0.0729	0.0925***
	D(SS(-1))	-0.0281	0.3815
	D(SS(-2))	0.0879	0.0216**
	CointEq(-1)	-1.2048	0.0051*
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	-0.0222	0.3829
	XINT	0.2894	0.0361**
	XCONS	0.6182	0.0021*
	SS	0.0069	0.9243
	C	1.4178	0.0001*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Appendix B-6

Table 4.7.1A

Philippines: ARDL Bound Test for Cointegration

Model (Import Components)	F-Statistics
PvC,MCAP,MINT,MCONS	10.2712*
PuC,MCAP,MINT,MCONS	7.4902*
GFCF,MCAP,MINT,MCONS	3.0904***
X,MCAP,MINT,MCONS	1.4379
S,MCAP,MINT,MCONS	0.7468
Model (Export Components)	F-Statistics
PvC,XCAP,XINT,XCONS	6.5603*
PuC,,XCAP,XINT,XCONS	20.0815*
GFCF,XCAP,XINT,XCONS	2.9972
M,XCAP,XINT,XCONS	1.7356
S,XCAP,XINT,XCONS	0.4629
*1% (LB:3.29;UB:4.39); **5%(LB:2.56;UB3.49); ***10%(LB2.20;UB3.09)	

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1B

Philippines: Private Consumption, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (1,0,2,1,2)	*D(MCAP)*	-0.0252	0.0114**
	D(MINT)	0.0051	0.8402
	D(MINT(-1))	-0.0453	0.1296
	D(MCONS)	-0.0082	0.6151
	D(SPvC)	0.0121	0.2654
	D(SPvC(-1))	-0.0303	0.0235**
	CointEq(-1)	-0.2741	0.0012*
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	0.0921	0.0109**
	MINT	-0.6118	0.0139**
	MCONS	0.7276	0.0002*
	SPvC	-0.2434	0.0163**
	C	4.2028	0.0003*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1C

Philippines: Public Consumption, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (1,1,0,1,1)	*D(MCAP)*	0.0302	0.6914
	D(MINT)	0.0926	0.4344
	D(MCONS)	-0.1474	0.1341
	D(SPuC)	-0.0574	0.3199
	CointEq(-1)	-0.3527	0.0303**
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	-0.1476	0.4513
	MINT	0.2624	0.3763
	MCONS	0.5191	0.0044*
	SPuC	0.0255	0.9018
	C	1.7223	0.0303**

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1D

Philippines: Gross Fixed Capital Formation, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (2,0,0,0,2)	*D(MCAP)*	0.187219	0.0242**
	D(MINT)	0.437359	0.0321**
	D(MCONS)	-0.039631	0.7741
	D(SGFCF)	-0.022038	0.7222
	CointEq(-1)	-0.466145	0.0257**
	D(SGFCF(-1))	-0.148284	0.0363**
	CointEq(-1)	-0.299884	0.0186**
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	-0.090074	0.4998
	MINT	0.512895	0.2226
	MCONS	0.429231	0.0319**
	SGFCF	-0.047277	0.7184
	C	1.814479	0.0121**

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1E

Philippines: Exports, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (1,0,0,0,0)	*D(MCAP)*	0.0015	0.9812
	D(MINT)	0.2149	0.3276
	D(MCONS)	0.5211	0.0022*
	D(SX)	-0.0782	0.3171
	CointEq(-1)	-1.1151	0.0001*
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	0.0014	0.9812
	MINT	0.1936	0.3422
	MCONS	0.4694	0.0010*
	SX	-0.0704	0.3182
	C	2.5807	0.0020*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1F

Philippines: Services, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (5,0,0,0,0)	*D(S(-1))*	-0.2946	0.2741
	D(S(-2))	0.3182	0.3866
	D(S(-3))	0.6353	0.1545
	D(S(-4))	-0.7467	0.0533**
	D(MCAP)	-0.0541	0.2181
	D(MINT)	0.1654	0.1151
	D(MCONS)	0.0941	0.1014
	D(SS)	-0.0133	0.4861
	CointEq(-1)	-0.2491	0.0751***
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	-0.2168	0.0821***
	MINT	0.6641	0.0323**
	MCONS	0.3783	0.0292**
	SS	-0.0533	0.5284
	C	3.0795	0.0006*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1G

Philippines: Private Consumption, Exports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (1,1,1,0,1)	*D(XCAP)*	0.0176	0.2715
	D(XINT)	0.0042	0.7459
	D(XCONS)	-0.0045	0.8391
	D(SPvC)	-0.0174	0.0492**
	CointEq(-1)	-0.0845	0.0057*
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	0.2192	0.0626**
	XINT	0.4102	0.0078*
	XCONS	0.0534	0.8331
	SPvC	0.4882	0.0065*
	C	2.8626	0.0002*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1H

Philippines: Public Consumption, Exports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (3,2,1,1,2)	*D(PuC(-1))*	-1.1312	0.0109**
	D(PuC(-2))	-1.0723	0.0141**
	D(XCAP)	-0.1151	0.3851
	D(XCAP(-1))	0.1099	0.2035
	D(XINT)	0.1497	0.1281
	D(XCONS)	0.0781	0.6396
	D(SPuC)	-0.1506	0.0524**
	D(SPuC(-1))	0.0595	0.3882
	CointEq(-1)	-0.2239	0.1002***
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	-1.1224	0.0292**
	XINT	2.0757	0.1608
	XCONS	-0.5009	0.6145
	SPuC	-1.5717	0.1061
	C	5.4503	0.0138*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1I

Philippines: Gross Fixed Capital Formation, Exports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (2,0,0,0,2)	*D(GFCF(-1))*	-0.2227	0.1568
	D(XCAP)	0.0906	0.3068
	D(XINT)	-0.1175	0.0722***
	D(XCONS)	0.5963	0.0029*
	D(SGFCF)	0.0464	0.2578
	D(SGFCF(-1))	-0.1483	0.0361**
	CointEq(-1)	-0.2999	0.0186**
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	0.3028	0.3743
	XINT	-0.3902	0.0981***
	XCONS	1.9875	0.0023*
	SGFCF	1.6587	0.0167**
	C	-1.2092	0.4326

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1J

Philippines: Imports, Exports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (1,0,0,0,0)	*D(XCAP)*	0.0077	0.9471
	D(XINT)	0.1279	0.3728
	D(XCONS)	0.1788	0.4241
	D(SM)	-0.0747	0.4246
	CointEq(-1)	-0.4175	0.1952
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	0.0184	0.9469
	XINT	0.3063	0.2479
	XCONS	0.4283	0.3825
	SM	-0.1788	0.5597
	C	2.8125	0.0011*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1K

Philippines: Services, Exports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (5,0,0,0,0)	*D(S(-1))*	-0.8187	0.0257**
	D(S(-2))	-1.5517	0.0225**
	D(S(-3))	-0.6605	0.0588***
	D(S(-4))	-0.4198	0.0543**
	D(XCAP)	0.1488	0.0146**
	D(XINT)	0.1576	0.0101*
	D(XCONS)	-0.0852	0.0707***
	D(SS)	0.0251	0.2401
	CointEq(-1)	-0.0343	0.4027
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	4.3379	0.4035
	XINT	4.5938	0.3601
	XCONS	-2.4835	0.5015
	SS	0.7291	0.2956
	C	-4.2312	0.6151

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Appendix B-7

Table 4.8.1A

Singapore: ARDL Bound Test for Cointegration

Model (Import Components)	F-Statistics
PvC,MCAP,MINT,MCONS	1.3651
PuC,MCAP,MINT,MCONS	5.5973*
GFCF,MCAP,MINT,MCONS	5.4839*
X,MCAP,MINT,MCONS	2.8021
S,MCAP,MINT,MCONS	3.8672**
Model (Export Components)	F-Statistics
PvC,XCAP,XINT,XCONS	7.7445*
PvC,XCAP,XINT,XCONS	8.6512*
GFCF,XCAP,XINT,XCONS	2.2431
M,XCAP,XINT,XCONS	3.0420
S,XCAP,XINT,XCONS	1.8856
*1% (LB:3.29;UB:4.39);	**5%(LB:2.56;UB3.49);
***10%(LB2.20;UB3.09)	

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.8.1B

Singapore: Private Consumption, Imports & Structural

Cointegrating Form	Variable	Coefficient	Prob.
Model (1,0,0,0,0)	*D(MCAP)*	0.0515	0.2365
	D(MINT)	-0.0675	0.3329
	D(MCONS)	0.0991	0.1145
	D(SPvC)	0.0679	0.0457**
	CointEq(-1)	-0.2036	0.0311**
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	0.2528	0.0854***
	MINT	-0.3315	0.2731
	MCONS	0.4863	0.0217**
	SPvC	0.3332	0.1954
	C	2.3832	0.0001*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.8.1C

Singapore: Public Consumption, Imports & Structural

Cointegrating Form	Variable	Coefficient	Prob.
Model (3,3,2,3,3)	*D(PuC(-1))*	-0.2043	0.0589***
	D(PuC(-2))	-0.2902	0.0145**
	D(MCAP)	-0.1841	0.1383
	D(MCAP(-1))	-0.2417	0.0167**
	D(MCAP(-2))	-0.3131	0.0031*
	D(MINT)	0.4064	0.0098*
	D(MINT(-1))	0.4931	0.0025*
	D(MCONS)	-0.1389	0.0489**
	D(MCONS(-1))	-0.4063	0.0091*
	D(MCONS(-2))	-0.0997	0.1326
	D(SPuC)	0.1318	0.0178**
	D(SPuC(-1))	-0.0725	0.0613***
	D(SPuC(-2))	0.0402	0.1064
	CointEq(-1)	-0.7756	0.0007*
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	0.4174	0.0009*
	MINT	-0.0373	0.6943
	MCONS	0.2664	0.0078*
	SPuC	0.3895	0.0076*
	C	0.1548	0.4448

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.8.1D

Singapore: Gross Fixed Capital Formation, Imports & Structural

Cointegrating Form	Variable	Coefficient	Prob.
Model (4,3,2,3,2)	*D(GFCF(-1))*	1.8426	0.0606***
	D(GFCF(-2))	0.4601	0.4403
	D(GFCF(-3))	1.6775	0.0132**
	D(MCAP)	1.5585	0.0175**
	D(MCAP(-1))	-0.8886	0.0402**
	D(MCAP(-2))	0.9946	0.0101*
	D(MINT)	-1.5357	0.0216**
	D(MINT(-1))	0.8164	0.0337**
	D(MCONS)	0.7653	0.0109*
	D(MCONS(-1))	-0.0775	0.7437
	D(MCONS(-2))	-0.3135	0.3666
	D(SGFCF)	-0.0708	0.5436
	D(SGFCF(-1))	0.0415	0.4129
	CointEq(-1)	-1.1299	0.1009***
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	0.9649	0.0151*
	MINT	-2.2138	0.0244**
	MCONS	1.6358	0.0162**
	SGFCF	-0.1459	0.3765
	C	0.0231	0.9689

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.8.1E

Singapore: Exports, Imports & Structural

Cointegrating Form	Variable	Coefficient	Prob.
Model (3,2,2,2,2)	*D(X(-1))*	0.1059	0.6755
	D(X(-2))	-0.2441	0.0862***
	D(MCAP)	0.3368	0.0047*
	D(MCAP(-1))	-0.1235	0.4616
	D(MINT)	0.4051	0.0103*
	D(MINT(-1))	0.1398	0.1496
	D(MCONS)	0.0666	0.4564
	D(MCONS(-1))	-0.2793	0.0145*
	D(SGFCF)	0.0245	0.4879
	D(SGFCF(-1))	-0.0164	0.4908
	CointEq(-1)	-0.8571	0.0086*
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	0.6071	0.0001*
	MINT	0.1515	0.2255
	MCONS	0.3602	0.0062*
	SGFCF	0.0651	0.4127
	C	1.0418	0.0010*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.8.1F

Singapore: Services, Imports & Structural

Cointegrating Form	Variable	Coefficient	Prob.
Model (3,0,1,2,0)	*D(S(-1))*	0.0241	0.9151
	D(S(-2))	-0.3158	0.0511
	D(MCAP)	0.0613	0.3880
	D(MINT)	0.1907	0.0119***
	D(MCONS)	0.0642	0.2754
	D(MCONS(-1))	-0.1551	0.0837
	D(SS)	-0.0056	0.8344
	CointEq(-1)	-0.4138	0.0475**
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	0.1475	0.1934
	MINT	0.1617	0.4932
	MCONS	0.4134	0.0074*
	SS	-0.0134	0.8274
	C	2.0933	0.0020*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.8.1G

Singapore: Private Consumption, Exports & Structural

Cointegrating Form	Variable	Coefficient	Prob.
Model (3,1,0,0,2)	*D(PvC(-1))*	-0.4879	0.0114*
	D(PvC(-2))	-0.2885	0.2249
	D(XCAP)	0.0972	0.2591
	D(XINT)	0.0227	0.7455
	D(XCONS)	0.1152	0.0158**
	D(SPvC)	0.1003	0.0088*
	D(SPvC(-1))	-0.1086	0.0022*
	CointEq(-1)	-0.2568	0.0251**
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	-0.1181	0.5247
	XINT	0.0885	0.7257
	XCONS	0.4485	0.0675***
	SPvC	1.4147	0.0112*
	C	2.8694	0.0007*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.8.1H

Singapore: Public Consumption, Exports & Structural

Cointegrating Form	Variable	Coefficient	Prob.
Model (1,3,3,3,3)	*D(XCAP)*	-0.1259	0.3889
	D(XCAP(-1))	-0.2522	0.1282
	D(XCAP(-2))	-0.1983	0.1043***
	D(XINT)	0.2823	0.0655***
	D(XINT(-1))	-0.0479	0.6658
	D(XINT(-2))	0.2196	0.0930***
	D(XCONS)	-0.2449	0.0252**
	D(XCONS(-1))	-0.1754	0.1588
	D(XCONS(-2))	-0.3354	0.0314**
	D(SPuC)	0.1983	0.0023*
	D(SPuC(-1))	-0.1551	0.0324**
	D(SPuC(-2))	-0.0346	0.4141
	CointEq(-1)	-1.1355	0.0030*
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	0.2309	0.0168*
	XINT	0.5185	0.0096*
	XCONS	-0.1078	0.3526
	SPuC	0.5557	0.0003*
	C	0.4507	0.1518

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.8.1I

Singapore: Gross Fixed Capital Formation, Exports & Structural

Cointegrating Form	Variable	Coefficient	Prob.
Model (1,0,0,0,0)	*D(XCAP)*	0.2001	0.0152**
	D(XINT)	-0.3949	0.0031*
	D(XCONS)	0.4199	0.0005*
	D(SGFCF)	0.0704	0.2321
	CointEq(-1)	-0.3067	0.0003*
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	0.6525	0.0048*
	XINT	-1.2877	0.0056*
	XCONS	1.3693	0.0011*
	SGFCF	0.2296	0.2281
	C	-0.2181	0.7461

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.8.1J

Singapore: Imports, Exports & Structural

Cointegrating Form	Variable	Coefficient	Prob.
Model (1,0,0,2,1)	*D(XCAP)*	0.6091	0.0012*
	D(XINT)	-0.0692	0.4182
	D(XCONS)	0.2213	0.0467**
	D(XCONS(-1))	-0.1202	0.1519
	D(SM)	-0.0572	0.1862
	CointEq(-1)	-0.9611	0.0001*
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	0.6337	0.0020*
	XINT	-0.0718	0.4106
	XCONS	0.4844	0.0001*
	SM	-0.1113	0.0918***
	C	0.8831	0.0002*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.8.1K

Singapore: Services, Exports & Structural

Cointegrating Form	Variable	Coefficient	Prob.
Model (3,1,0,0,0)	*D(S(-1))*	-0.1675	0.3715
	D(S(-2))	-0.2317	0.1527
	D(XCAP)	0.1491	0.1366
	D(XINT)	-0.0021	0.9719
	D(XCONS)	0.1299	0.0277**
	D(SS)	0.0156	0.6238
	CointEq(-1)	-0.2193	0.0057*
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	0.0668	0.7569
	XINT	-0.0098	0.9723
	XCONS	0.5925	0.0186**
	SS	0.0712	0.6351
	C	2.3891	0.0058*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Appendix B-8

Table 4.9.1A

Thailand: ARDL Bound Test for Cointegration

Model (Import Components)	F-Statistics
PvC,MCAP,MINT,MCONS	2.5434
PuC,MCAP,MINT,MCONS	3.7361**
GFCF,MCAP,MINT,MCONS	1.1639
X,MCAP,MINT,MCONS	2.5917
S,MCAP,MINT,MCONS	0.9195
Model (Export Components)	F-Statistics
PvC,XCAP,XINT,XCONS	1.9361
PuC,XCAP,XINT,XCONS	10.7721*
GFCF,XCAP,XINT,XCONS	1.3859
M,XCAP,XINT,XCONS	0.9525
S,XCAP,XINT,XCONS	22.0591*
*1% (LB:3.29;UB:4.39);	**5%(LB:2.56;UB3.49);
***10%(LB2.20;UB3.09)	

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.9.1B

Thailand: Private Consumption, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (5,0,0,0,0)	*D(PvC(-1))*	0.0079	0.9416
	D(PvC(-2))	0.3121	0.0009*
	D(PvC(-3))	0.0559	0.3621
	D(PvC(-4))	-0.1537	0.0393**
	D(MCAP)	-0.0139	0.5146
	D(MINT)	0.0896	0.0191**
	D(MCONS)	-0.0184	0.2473
	D(SPvC)	-0.1438	0.0003*
	CointEq(-1)	-0.0879	0.0122*
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	-0.1587	0.5167
	MINT	1.0197	0.0473**
	MCONS	-0.2049	0.3622
	SPvC	-1.6362	0.0182**
	C	3.9768	0.0012*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.9.1C

Thailand: Public Consumption, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (1,3,3,3,3)	*D(MCAP)*	-0.0818	0.4976
	D(MCAP(-1))	0.1263	0.3497
	D(MCAP(-2))	-0.0635	0.6241
	D(MINT)	0.0512	0.8086
	D(MINT(-1))	-0.0558	0.6770
	D(MINT(-2))	0.1783	0.3012
	D(MCONS)	-0.0681	0.5382
	D(MCONS(-1))	0.0469	0.6905
	D(MCONS(-2))	-0.1873	0.0630***
	D(SPuC)	-0.2192	0.0098*
	D(SPuC(-1))	-0.0032	0.9729
	D(SPuC(-2))	0.1414	0.1247
	CointEq(-1)	-0.1957	0.1004***
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	-0.3852	0.6763
	MINT	-0.2442	0.8499
	MCONS	0.8047	0.0977***
	SPuC	-2.6376	0.1028
	C	4.0206	0.0332**

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.9.1D

Thailand: Gross Fixed Capital Formation, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (2,0,0,0,0)	*D(GFCF(-1))*	0.3004	0.0058*
	D(MCAP)	-0.0054	0.9456
	D(MINT)	0.3164	0.0488**
	D(MCONS)	0.0292	0.5984
	D(SGFCF)	-0.3926	0.0017*
	CointEq(-1)	-0.4468	0.0002*
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	-0.0122	0.9458
	MINT	0.7082	0.0586***
	MCONS	0.0654	0.5811
	SGFCF	-0.8787	0.0028*
	C	2.6944	0.0024*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.9.1E

Thailand: Exports, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (4,2,2,2,2)	*D(X(-1))*	-0.1675	0.6951
	D(X(-2))	-0.0831	0.5194
	D(X(-3))	-0.0356	0.7723
	D(MCAP)	-0.0953	0.3422
	D(MCAP(-1))	-0.2404	0.1953
	D(MINT)	-0.0043	0.9806
	D(MINT(-1))	0.3405	0.2221
	D(MCONS)	0.3577	0.0182**
	D(MCONS(-1))	-0.0996	0.3722
	D(SX)	-0.3446	0.0017*
	D(SX(-1))	-0.0956	0.3132
	CointEq(-1)	-0.7961	0.0417**
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	0.3622	0.0875***
	MINT	-0.7645	0.0895***
	MCONS	0.7453	0.0008*
	SX	-0.3934	0.0469**
	C	4.1014	0.0001*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.9.1F

Thailand: Services, Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (4,0,0,0,0)	*D(S(-1))*	0.2504	0.0002*
	D(S(-2))	0.0433	0.2993
	D(S(-3))	-0.0015	0.9756
	D(MCAP)	-0.0097	0.7064
	D(MINT)	0.0171	0.7015
	D(MCONS)	0.0455	0.0118**
	D(SS)	-0.2345	0.0005*
	CointEq(-1)	-0.0866	0.0073*
Long Run Coefficients	Variable	Coefficient	Prob.
	MCAP	-0.1123	0.7071
	MINT	0.1967	0.6964
	MCONS	0.5202	0.0048*
	SS	-2.7079	0.0083*
	C	4.0354	0.0017*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.9.1G

Thailand: Private Consumption, Exports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (2,1,2,0,0)	*D(PvC(-1))*	0.3175	0.0407**
	D(XCAP)	-0.0904	0.0194**
	D(XINT)	-0.0178	0.7283
	D(XINT(-1))	-0.0704	0.1389
	D(XCONS)	0.1353	0.0594***
	D(SPvC)	-0.0985	0.0006*
	CointEq(-1)	-0.2664	0.0269**
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	-0.0088	0.9046
	XINT	0.2056	0.1591
	XCONS	0.5076	0.0048*
	SPvC	-0.3704	0.0833***
	C	3.4257	0.0001*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.9.1H

Thailand: Public Consumption, Exports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (3,0,3,0,1)	*D(PuC(-1))*	0.0515	0.7763
	D(PuC(-2))	0.5685	0.0058*
	D(XCAP)	0.0418	0.1128
	D(XINT)	-0.3061	0.0015*
	D(XINT(-1))	-0.2187	0.0245**
	D(XINT(-2))	0.1761	0.0031*
	D(XCONS)	0.2027	0.0431**
	D(SPuC)	-0.1667	0.0023*
	CointEq(-1)	-0.3133	0.0133**
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	0.1313	0.2767
	XINT	0.1681	0.3504
	XCONS	0.6469	0.0019*
	SPuC	-1.0019	0.0247**
	C	0.6519	0.0318**

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.9.1I

Thailand: Gross Fixed Capital Formation, Exports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (3,0,0,0,0)	*D(GFCF(-1))*	0.4401	0.0006*
	D(GFCF(-2))	-0.2845	0.0456**
	D(XCAP)	-0.0413	0.2743
	D(XINT)	0.1509	0.1691
	D(XCONS)	-0.0322	0.8195
	D(SGFCF)	-0.4523	0.0021*
	CointEq(-1)	-0.0984	0.1004***
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	-0.4197	0.4438
	XINT	1.5338	0.4192
	XCONS	-0.3275	0.8474
	SGFCF	-4.5966	0.4347
	C	2.6993	0.1643

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.9.1J

Thailand: Imports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (1,0,0,0,0)	*D(XCAP)*	0.0219	0.3511
	D(XINT)	0.3657	0.0047*
	D(XCONS)	0.0997	0.3782
	D(SX)	-0.3118	0.0001*
	CointEq(-1)	-0.5242	0.0003*
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	0.0418	0.3293
	XINT	0.6963	0.0007*
	XCONS	0.1902	0.3476
	SX	-0.5948	0.0171**
	C	1.7544	0.0001*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.9.1K

Thailand: Services, Exports & Structural Break

Cointegrating Form	Variable	Coefficient	Prob.
Model (3,0,0,0,1)	*D(S(-1))*	-0.2851	0.0111**
	D(S(-2))	0.0997	0.1264
	D(XCAP)	-0.0377	0.0023*
	D(XINT)	0.1174	0.0017*
	D(XCONS)	0.0146	0.7385
	D(SS)	-0.2654	0.0021*
	CointEq(-1)	-0.1052	0.0239**
Long Run Coefficients	Variable	Coefficient	Prob.
	XCAP	-0.3585	0.0725***
	XINT	1.1155	0.0273**
	XCONS	0.1382	0.7148
	SS	-3.9955	0.0349**
	C	2.6611	0.0002*

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Appendix B-9

Table 4.10A

Pedroni Panel Cointegration Test (Imports: Capital, Intermediate & Consumption)

Constant	*PvC*	*PuC*	*GFCF*	*X*	*S*
Panel-v	1.2812	0.8807	0.1725	0.8807	1.1492
Panel-ρ	-0.2121	0.0023	0.3814	-0.2848	-0.2626
Panel- ρρ	-1.8625*	-1.4241	-2.1078*	-5.2200*	-1.8433*
Panel-adf	-1.0567	-0.9621	-2.5552*	-3.6600*	-0.8963
Group- ρ	0.7319	1.0693	1.0572	0.3963	0.8691
Group- ρρ	-1.6646*	-1.2775	-1.8878*	-5.6232*	-1.4157
Group-adf	-0.8632	-0.607	-2.6772*	-3.5821*	-0.6993

Note: *Pedroni (2004) statistics of one-sided tests with a critical value of -1.64 (k < -1.64 denotes the null of no cointegration is rejected) with the exception for the v-statistic which has a critical value of 1.64 (k > 1.64 where the null of no cointegration is rejected) at 5% significance level. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; S: services.

Table 4.10B

Pedroni Panel Cointegration Test (Imports: Capital, Intermediate & Consumption)

Constant & Trend	*PvC*	*PuC*	*GFCF*	*X*	*S*
Panel-v	13.3530*	5.1470*	1.0543	3.5169*	13.8392*
Panel-ρ	0.5613	0.7808	1.2635	0.3897	-0.2743
Panel- ρρ	-1.4243	-0.7462	-0.4989	-4.3474*	-4.4875*
Panel-adf	-1.1446	0.6115	-1.4434	-2.3357*	-3.7771*
Group- ρ	1.3884	1.8430*	1.9424*	1.2392	1.4973
Group- ρρ	-1.1767	-0.3381	-0.8637	-7.5146*	-2.4682*
Group-adf	-0.4607	-0.0182	-0.5917	-3.8957*	-2.5238*

Note: *Pedroni (2004) statistics of one-sided tests with a critical value of -1.64 (k < -1.64 denotes the null of no cointegration is rejected) with the exception for the v-statistic which has a critical value of 1.64 (k > 1.64 where the null of no cointegration is rejected) at 5% significance level. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; S: services.

Table 4.10C

Pedroni Panel Cointegration Test (Exports: Capital Intermediate & Consumption)

Constant	*PvC*	*PuC*	*GFCF*	*M*	*S*
Panel-v	0.8718	0.3088	0.8656	1.7123*	0.5578
Panel-ρ	0.2473	0.3974	0.1788	0.7128	0.4158
Panel- ρρ	-0.5213	-0.3618	-0.6875	-0.7882	-0.0372
Panel-adf	-0.5043	0.0459	-0.8695	-3.6640*	0.1772
Group- ρ	1.0549	1.5469*	1.2327	1.5631	1.6843*
Group- ρρ	-0.0409	0.6461	0.1981	-1.7587*	1.5096
Group-adf	-0.1453	0.8235	0.0636	-3.6481*	2.0276*

Note: *Pedroni (2004) statistics of one-sided tests with a critical value of -1.64 (k < -1.64 denotes the null of no cointegration is rejected) with the exception for the v-statistic which has a critical value of 1.64 (k > 1.64 where the null of no cointegration is rejected) at 5% significance level. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; M: imports; S: services.

Table 4.10D

Pedroni Panel Cointegration Test (Exports: Capital Intermediate & Consumption)

Constant & Trend	*PvC*	*PuC*	*GFCF*	*M*	*S*
Panel-v	9.9182*	4.6377*	-0.2652	0.4418	9.7322*
Panel-ρ	1.1649	1.1628	0.8609	1.6275	0.8828
Panel- ρρ	-0.5263	-0.0129	-1.5574	-1.1142	-2.7701*
Panel-adf	-1.6316	-0.3205	-2.2987*	-4.3921*	-5.3350*
Group- ρ	2.1163*	1.9825*	1.1646	2.0623*	1.2973
Group- ρρ	-1.8225*	0.7857	-1.8978*	-2.5055*	-2.7945*
Group-adf	-2.7424*	0.8638	-2.3981*	-3.8956*	-3.5364*

Note: *Pedroni (2004) statistics of one-sided tests with a critical value of -1.64 (k < -1.64 denotes the null of no cointegration is rejected) with the exception for the v-statistic which has a critical value of 1.64 (k > 1.64 where the null of no cointegration is rejected) at 5% significance level. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; M: imports; S: services.

Appendix B-10

Table 4.11A

FMOLS (Individual) Results, Dependent Variable: Private Consumption

	Indonesia	Malaysia	Philippines	Singapore	Thailand
MCAP	0.3137**	-0.4092*	-0.1391*	-0.2872	0.3215*
MINT	-0.5605**	-0.1152	0.2513**	-0.3612*	-0.0339
MCON	0.1960**	0.4138*	0.4872*	0.7152*	0.1539**
XCAP	-0.0197	0.0830	0.2113*	1.0581**	-0.0172
XINT	-0.1342	0.5931*	-0.0752	0.0631	0.0936
XCON	0.7816*	0.0271	-0.0134	-0.5302*	0.0352

Note: *1%significance level; **5% significance level; ***10% significance level; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.11B

FMOLS (Individual) Results, Dependent Variable: Public Consumption

	Indonesia	Malaysia	Philippines	Singapore	Thailand
MCAP	0.7639*	-0.3582	-0.2519*	-1.0693**	-0.1172
MINT	-1.4275*	-0.5512**	0.0103	-0.5237*	-0.5745*
MCON	0.4508*	0.4273*	0.4038*	0.8254*	0.8632*
XCAP	0.1963	0.2239**	-0.1254	2.1753*	-0.4791*
XINT	-0.1856	0.9452*	-0.2620**	-0.1953**	0.4032*
XCON	0.9912*	0.0538	0.5415*	-0.4545*	0.4382**

Note: *1%significance level; **5% significance level; ***10% significance level; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export

Table 4.11C

FMOLS (Individual) Results, Dependent Variable: Gross Fixed Capital Formation

	Indonesia	Malaysia	Philippines	Singapore	Thailand
MCAP	0.7452*	0.3163**	-0.0552	-0.0661	-0.3231***
MINT	-0.8238*	-0.1351	0.4401*	0.2128	0.9272*
MCON	0.4015*	1.2591*	0.3630*	1.0307*	1.0873*
XCAP	-0.0972***	-0.8045*	-0.1817**	0.0253	-0.8156*
XINT	-0.5732*	0.1510	-0.2591*	-0.3682**	0.3437***
XCON	0.8913*	-1.0134*	0.5208*	-0.4752**	-1.1975*

Note: *1%significance level; **5% significance level; ***10% significance level; MCONS consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export

Table 4.11D

FMOLS (Individual) Results, Dependent Variable: Exports

	Indonesia	Malaysia	Philippines	Singapore	Thailand
MCAP	0.1853**	0.3707*	0.0176	-0.3581***	-0.0539***
MINT	-0.1161	0.2542**	0.2945*	0.1130	0.0932
MCON	0.3773*	-0.3981*	0.2531*	0.4931*	0.2351*
XCAP	0.1082**	0.2467*	0.0567	1.0159*	0.3627*
XINT	-0.0254	0.1123	0.2249*	-0.0142	0.1458*
XCON	0.1471	0.5161*	-0.0471	-0.1670**	0.2139*

Note: *1%significance level; **5% significance level; ***10% significance level. MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export

Table 4.11E

FMOLS (Individual) Results, Dependent Variable: Imports

	Indonesia	Malaysia	Philippines	Singapore	Thailand
MCAP	0.1869**	0.3768*	0.0173	-0.3521***	-0.0542***
MINT	-0.1112	0.2538**	0.2951*	0.1162***	0.0051
MCON	0.3762*	-0.3926*	0.2506*	0.4980*	0.2334*
XCAP	0.1083**	0.2448*	0.0561	1.0161*	0.3642*
XINT	-0.0271	0.1141	0.2263*	-0.0163	0.1462*
XCON	0.1459	0.5182*	-0.0430	-0.1692**	0.2173*

Note: *1%significance level; **5% significance level; ***10% significance level
MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export

Table 4.11F

FMOLS (Individual) Results, Dependent Variable: Services

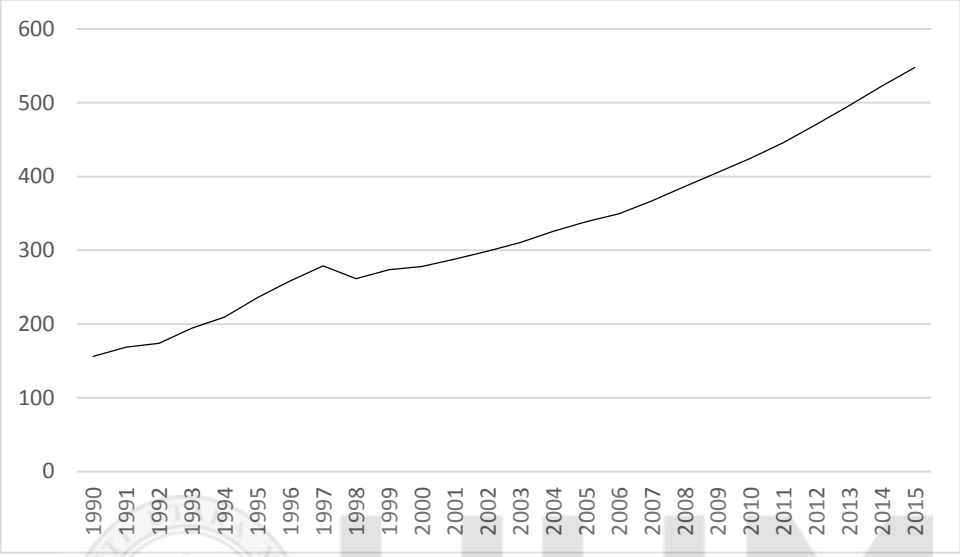
	Indonesia	Malaysia	Philippines	Singapore	Thailand
MCAP	0.5510*	-0.6701*	-0.1872*	-0.9318**	0.0912**
MINT	-0.8973*	-0.0462	0.2463**	0.1638	-0.1863*
MCON	0.3279*	0.3638*	0.5638*	0.7830*	0.6156*
XCAP	-0.0535	0.2203**	0.2083*	1.3916**	-0.1534*
XINT	-0.2093***	0.5872*	-0.0452	-0.0753	0.1465*
XCON	1.0138*	0.0949	0.0285	-0.5765*	-0.0392

Note: *1%significance level; **5% significance level; ***10% significance level
MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export

Appendix C

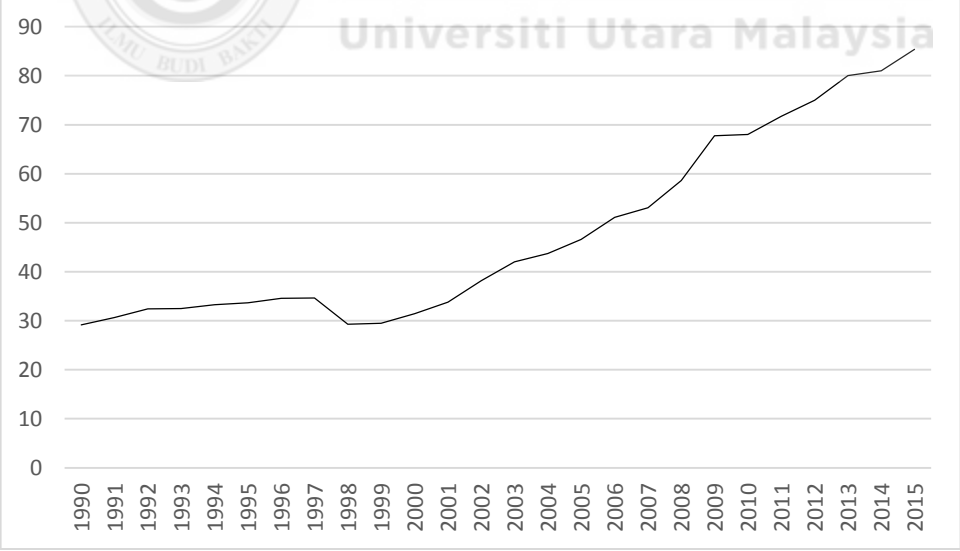
Appendix C-1

Figure B-1A
Indonesia: Private Consumption (US$bn)



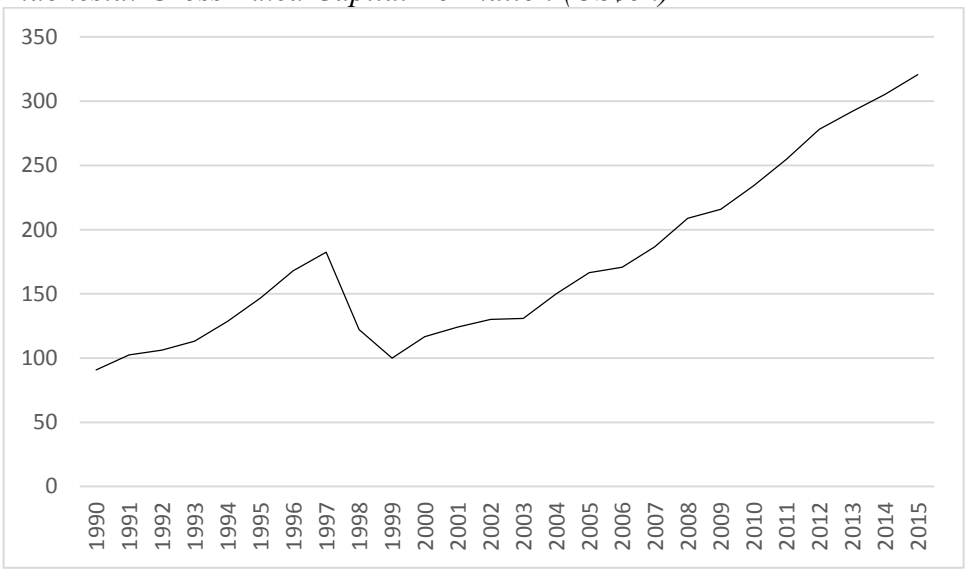
Source: Author

Figure B-1B
Indonesia: Public Consumption (US$bn)



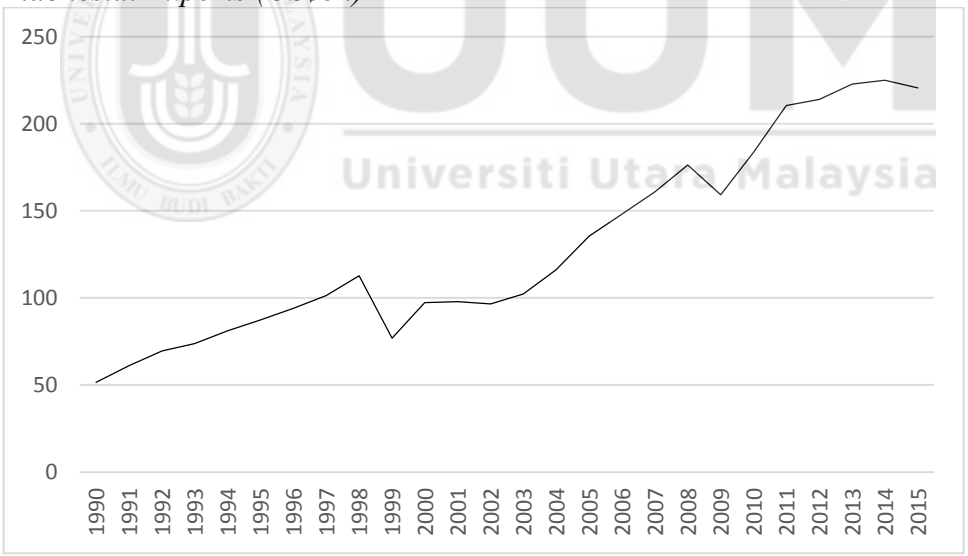
Source: Author

Figure B-1C
Indonesia: Gross Fixed Capital Formation (US$bn)



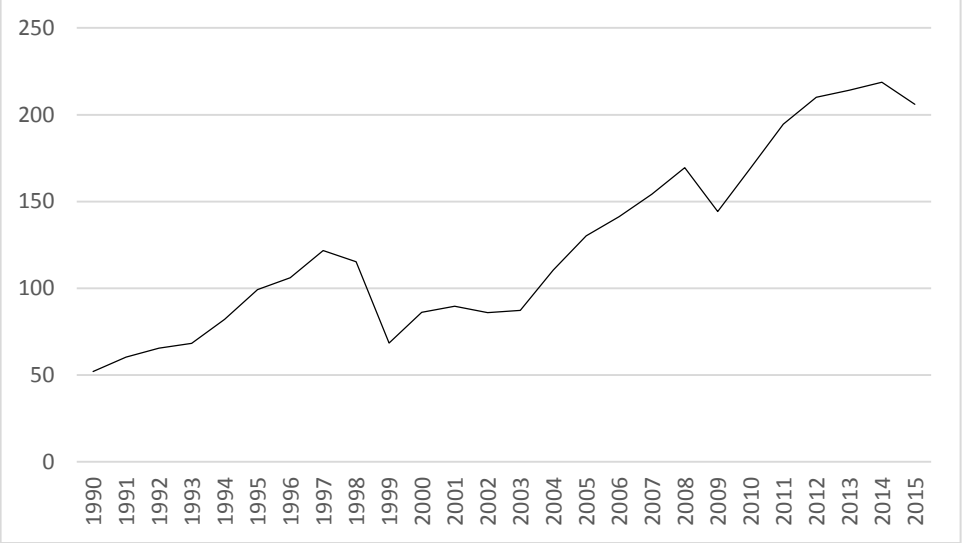
Source: Author

Figure B-1D
Indonesia: Exports (US$bn)



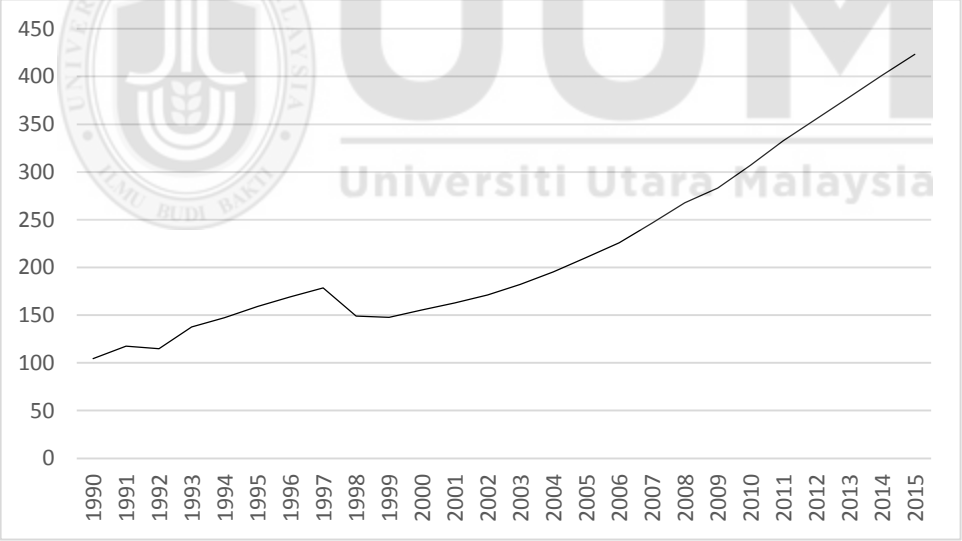
Source: Author

Figure B-1E
Indonesia: Imports (US$bn)



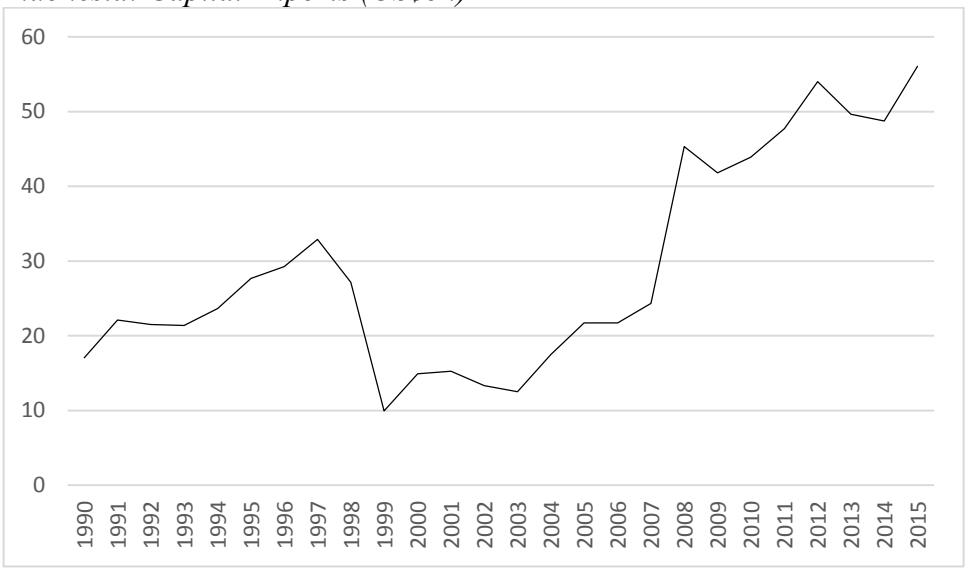
Source: Author

Figure B-1F
Indonesia: Services (US$bn)



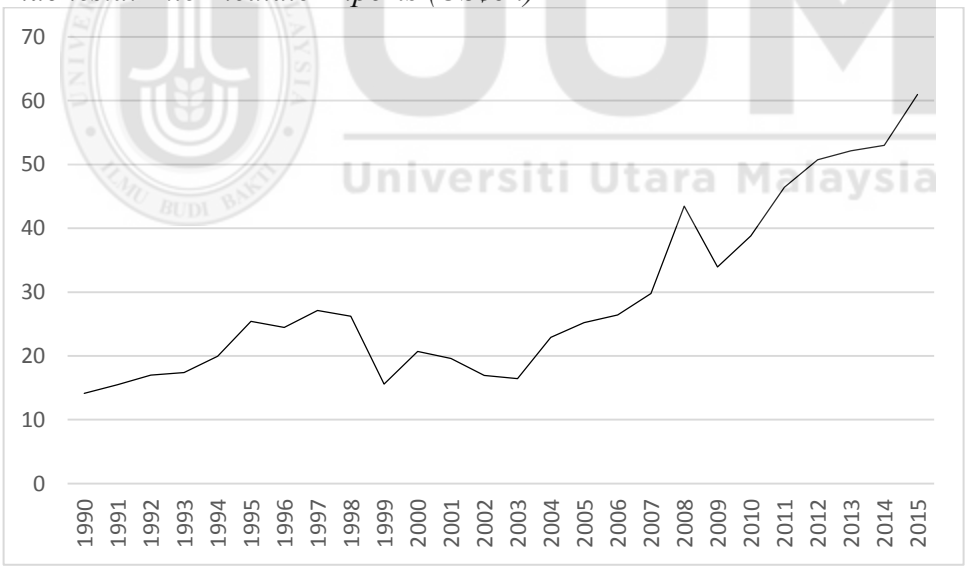
Source: Author

Figure B-1G
Indonesia: Capital Imports (US$bn)



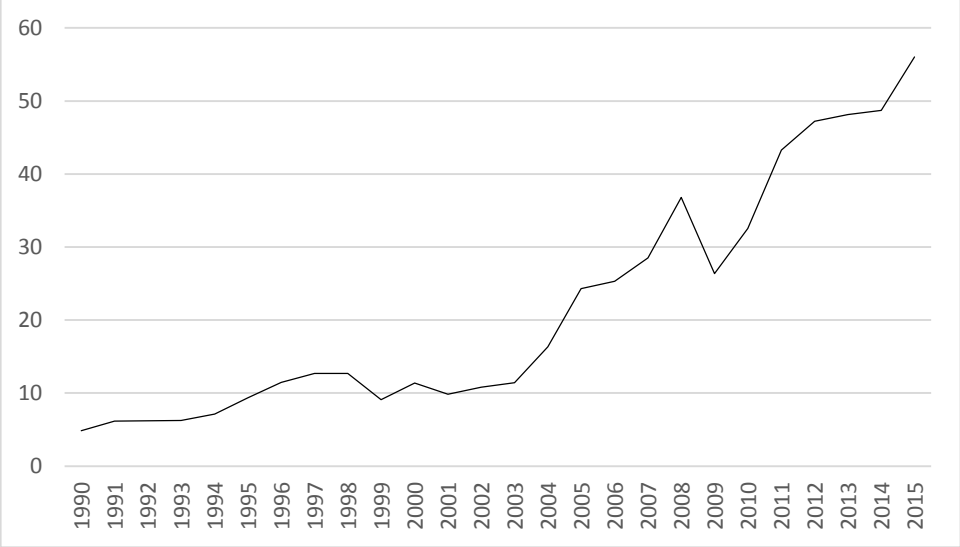
Source: Author

Figure B-1H
Indonesia: Intermediate Imports (US$bn)



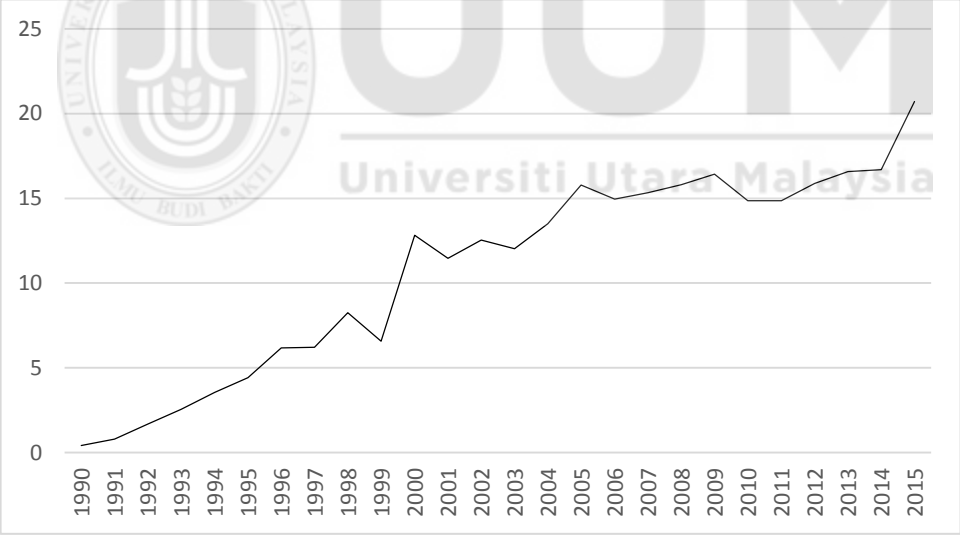
Source: Author

Figure B-1I
Indonesia: Consumption Imports (US$bn)



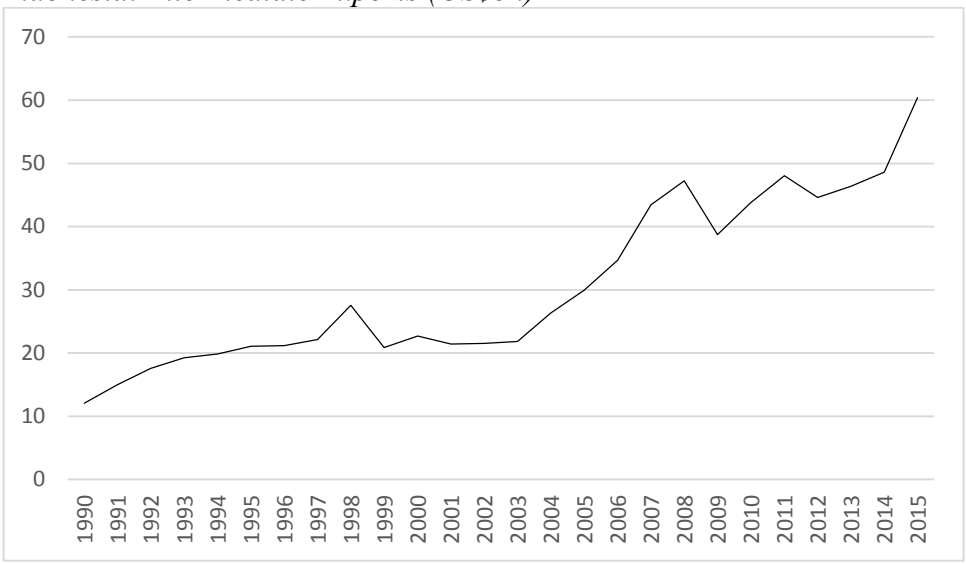
Source: Author

Figure B-1J
Indonesia: Capital Exports (US$bn)



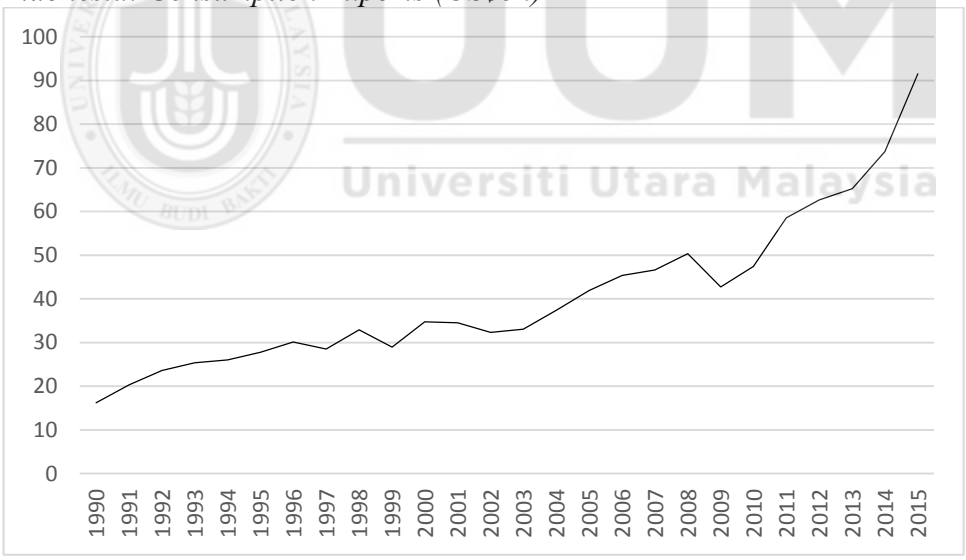
Source: Author

Figure B-1K
Indonesia: Intermediate Exports (US$bn)



Source: Author

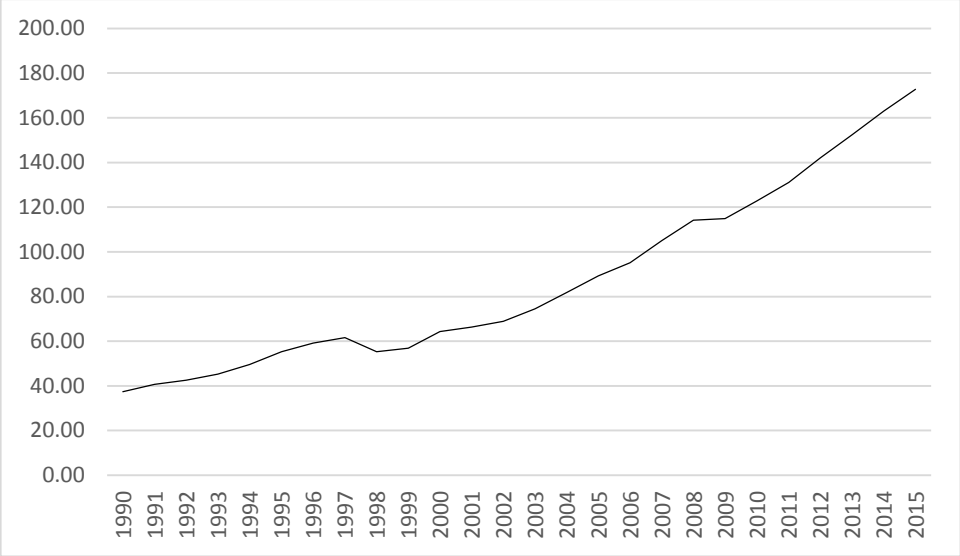
Figure B-1L
Indonesia: Consumption Exports (US$bn)



Source: Author

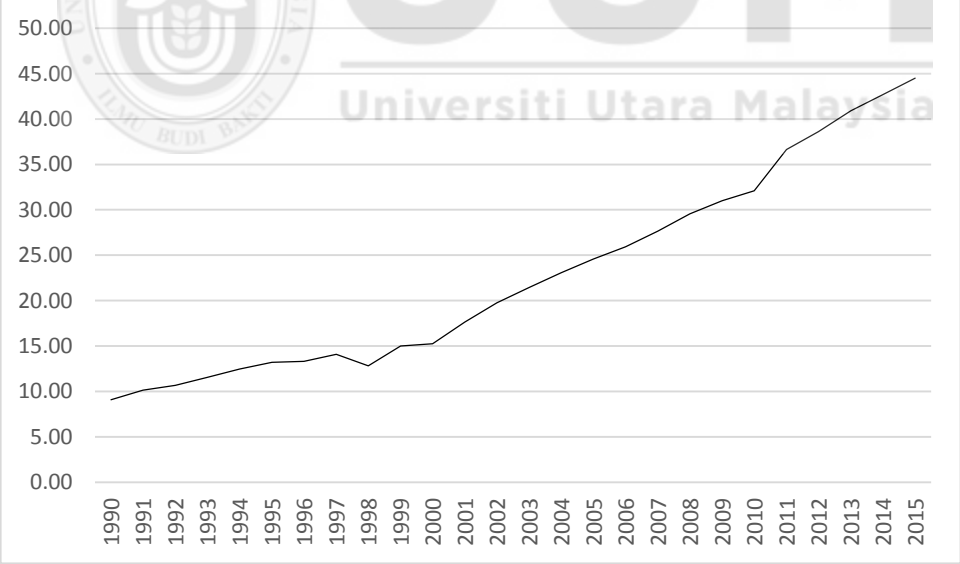
Appendix C-2

Figure B-2A
Malaysia: Private Consumption (US$bn)



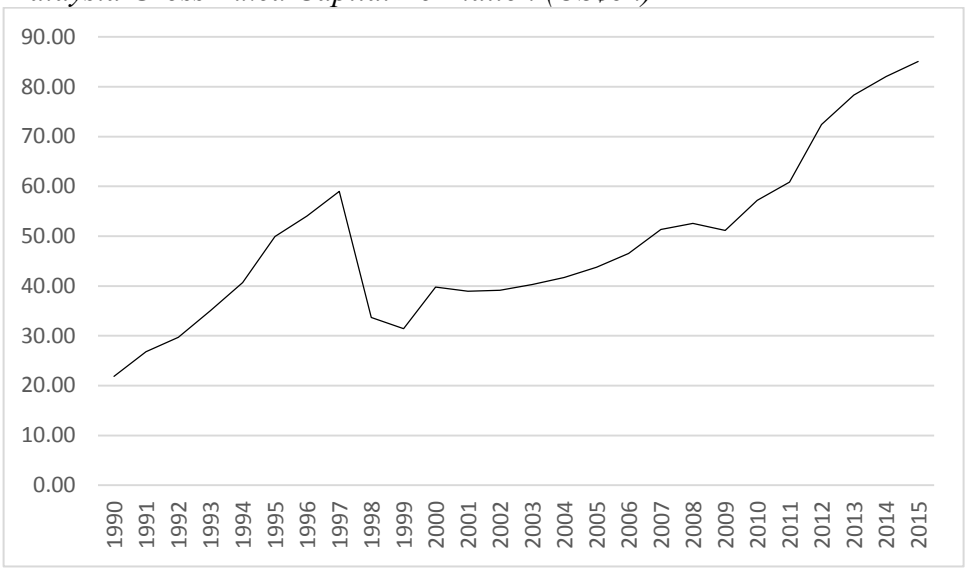
Source: Author

Figure B-2B
Malaysia Public Consumption (US$bn)



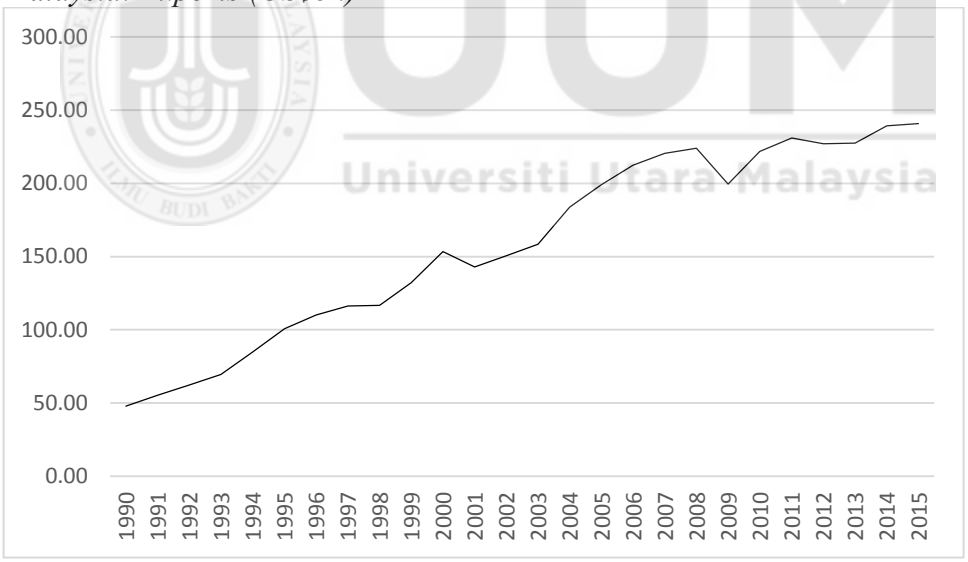
Source: Author

Figure B-2C
Malaysia Gross Fixed Capital Formation (US$bn)



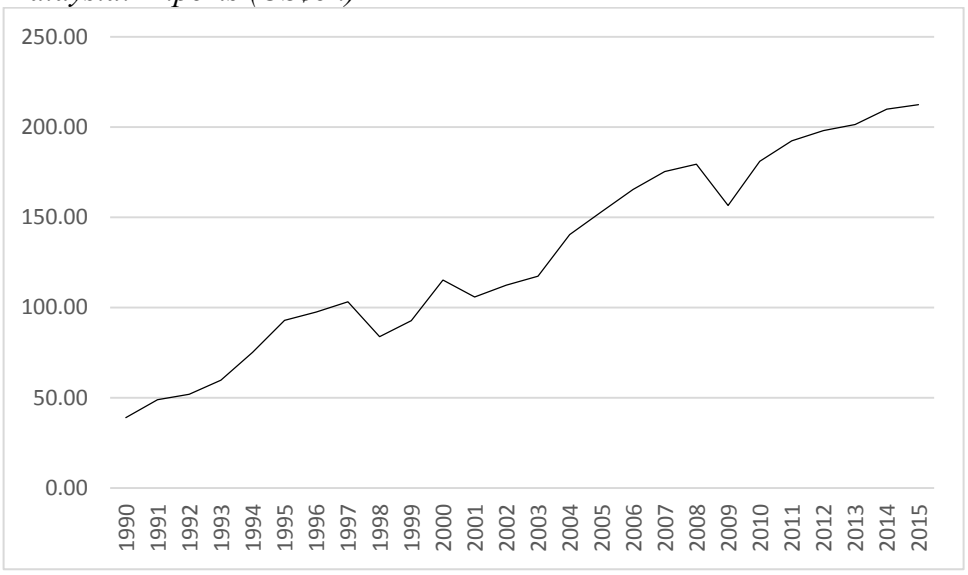
Source: Author

Figure B-2D
Malaysia: Exports (US$bn)



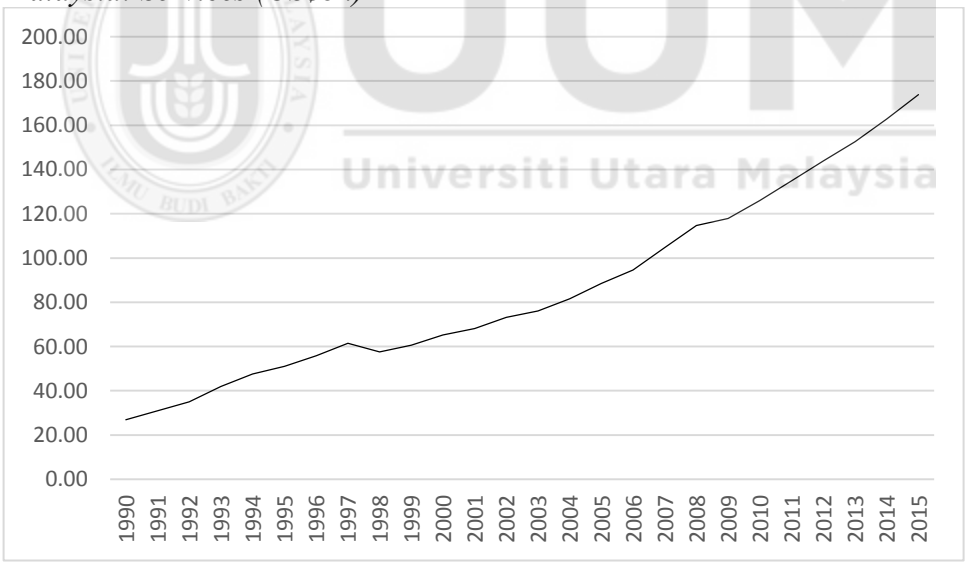
Source: Author

Figure B-2E
Malaysia: Imports (US$bn)



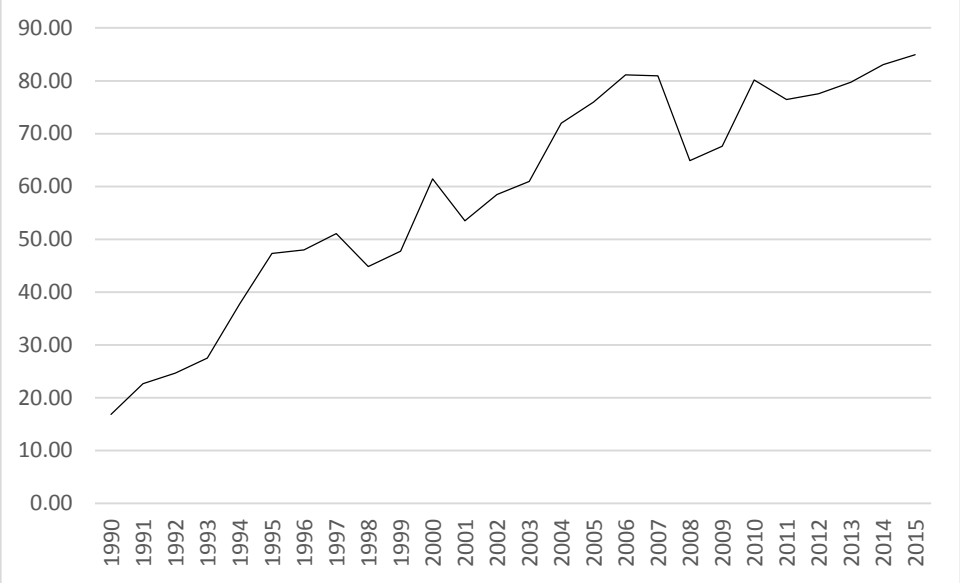
Source: Author

Figure B-2F
Malaysia: Services (US$bn)



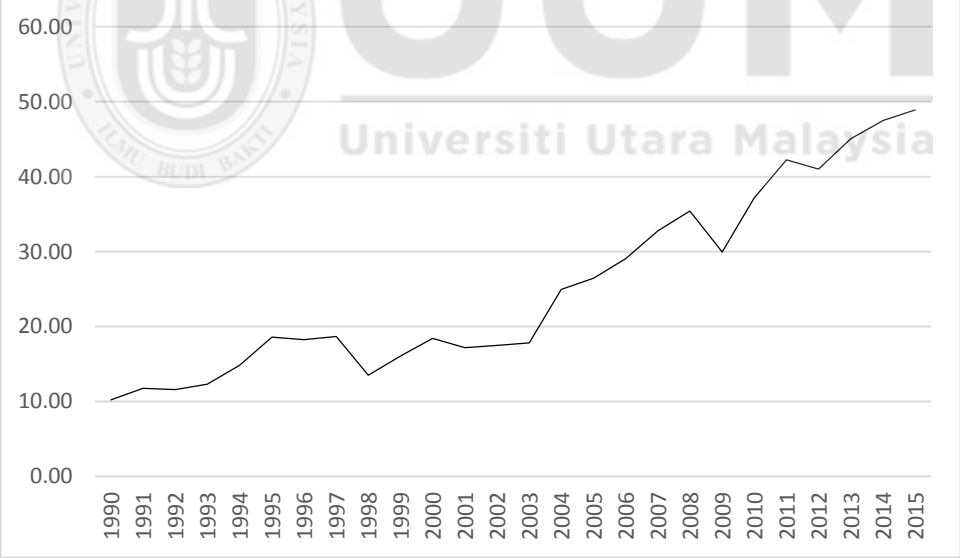
Source: Author

Figure B-2G
Malaysia: Capital Imports (US$bn)



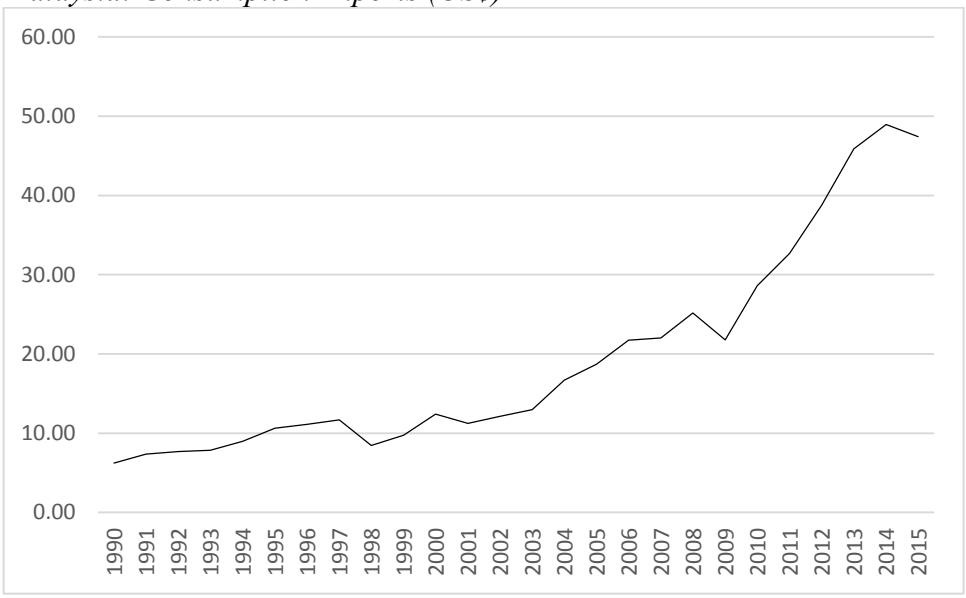
Source: Author

Figure B-2H
Malaysia: Intermediate Imports (US$bn)



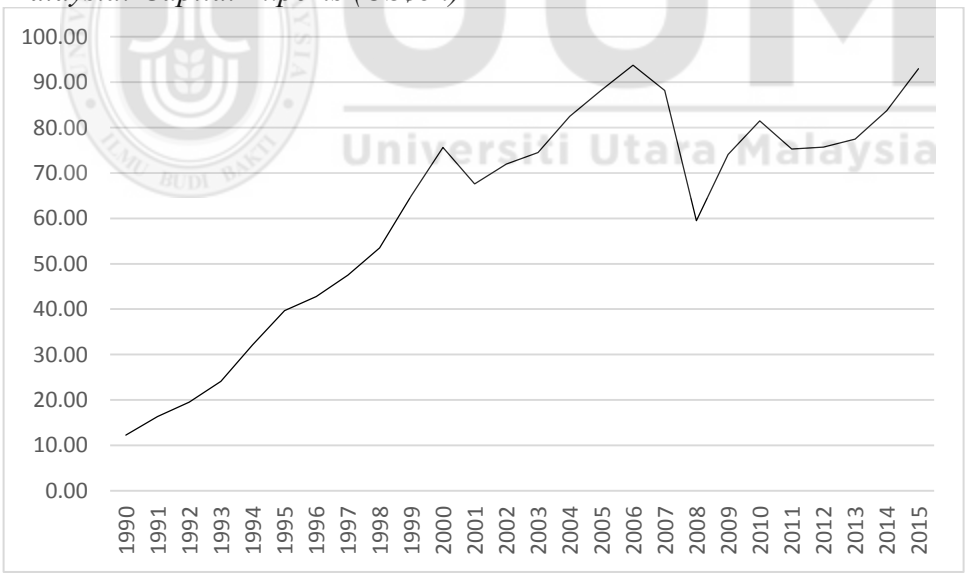
Source: Author

Figure B-2I
Malaysia: Consumption Imports (US$)



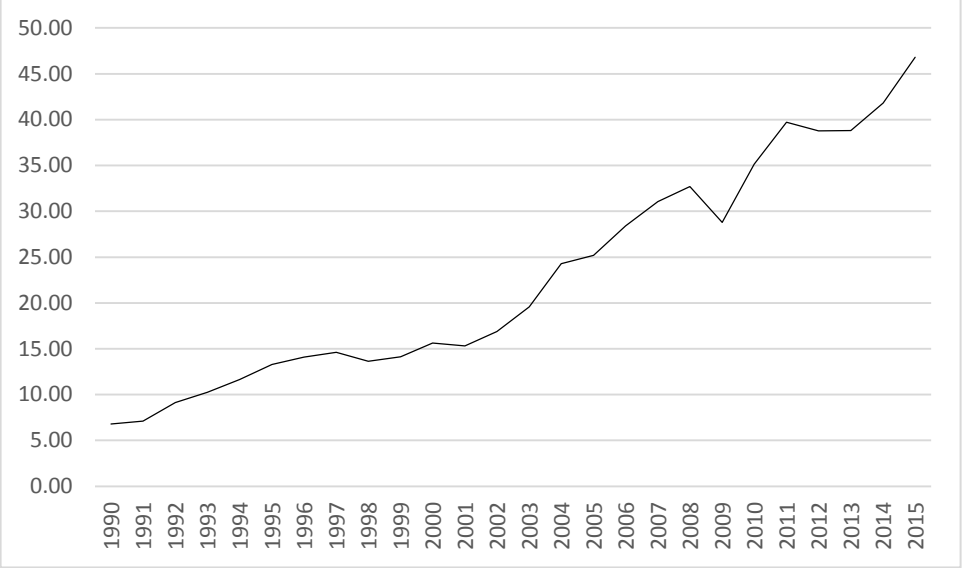
Source: Author

Figure B-2J
Malaysia: Capital Exports (US$bn)



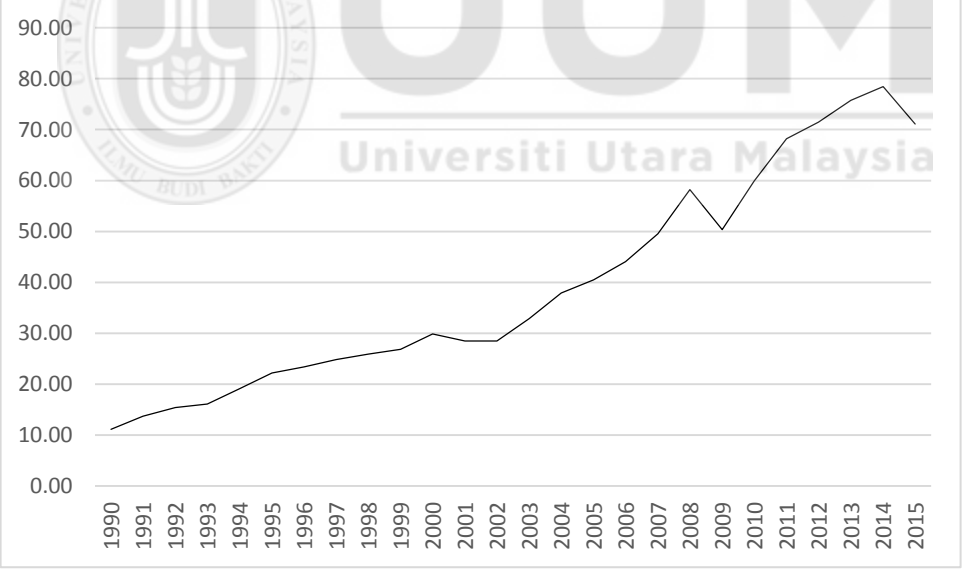
Source: Author

Figure B-2K
Malaysia: Intermediate Exports (US$bn)



Source: Author

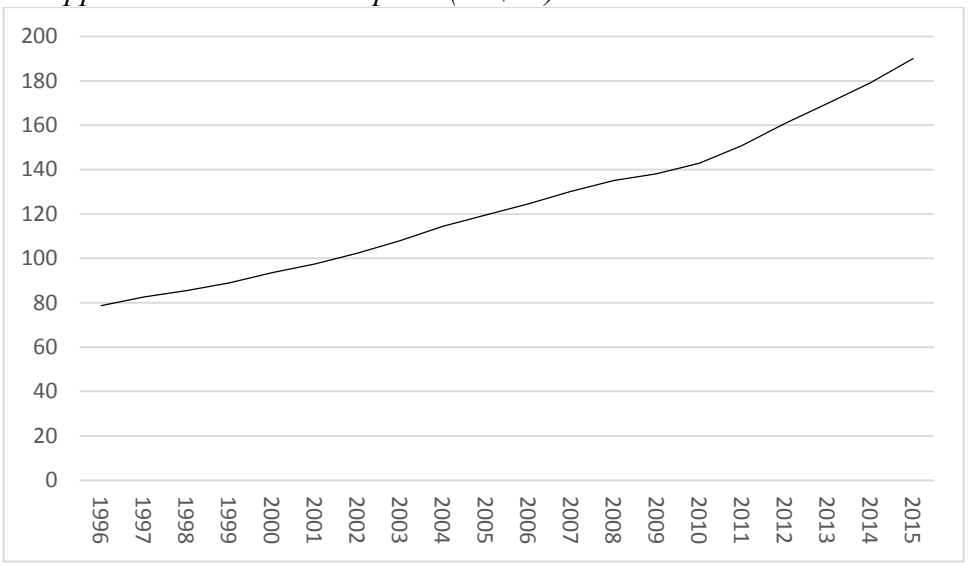
Figure B-2L
Malaysia: Consumption Exports (US$bn)



Source: Author

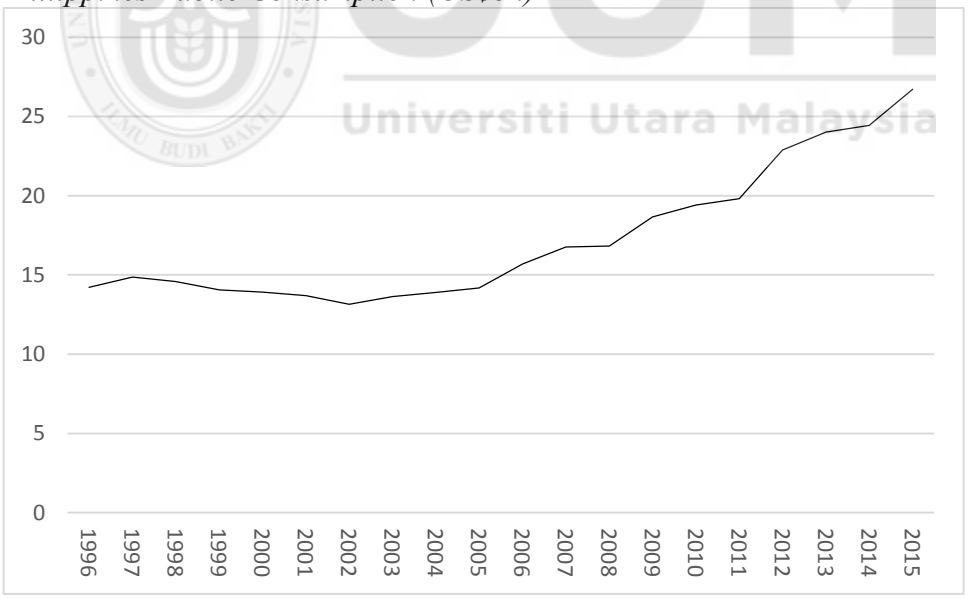
Appendix C-3

Figure B-3A
Philippines: Private Consumption (US$bn)



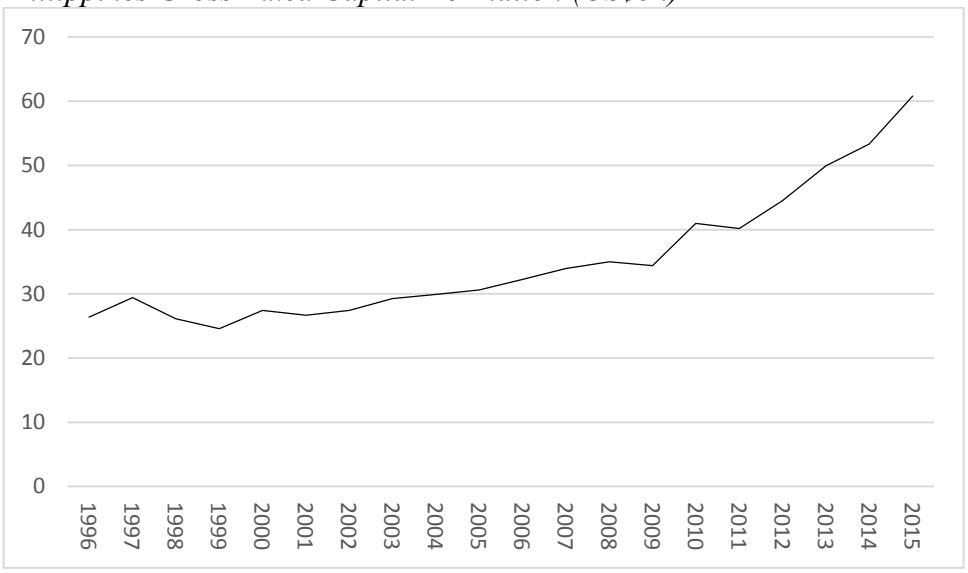
Source: Author

Figure B-3B
Philippines Public Consumption (US$bn)



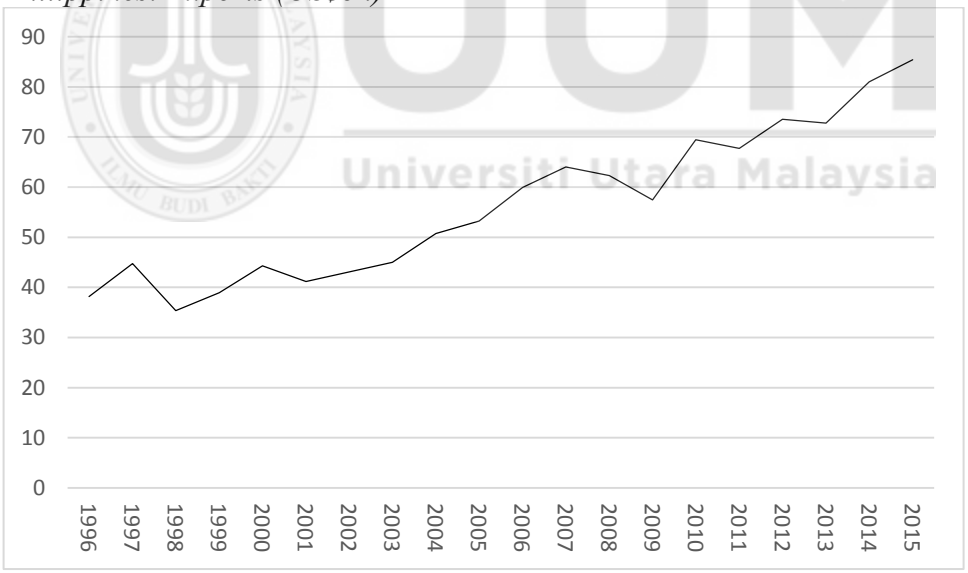
Source: Author

Figure B-3C
Philippines Gross Fixed Capital Formation (US$bn)



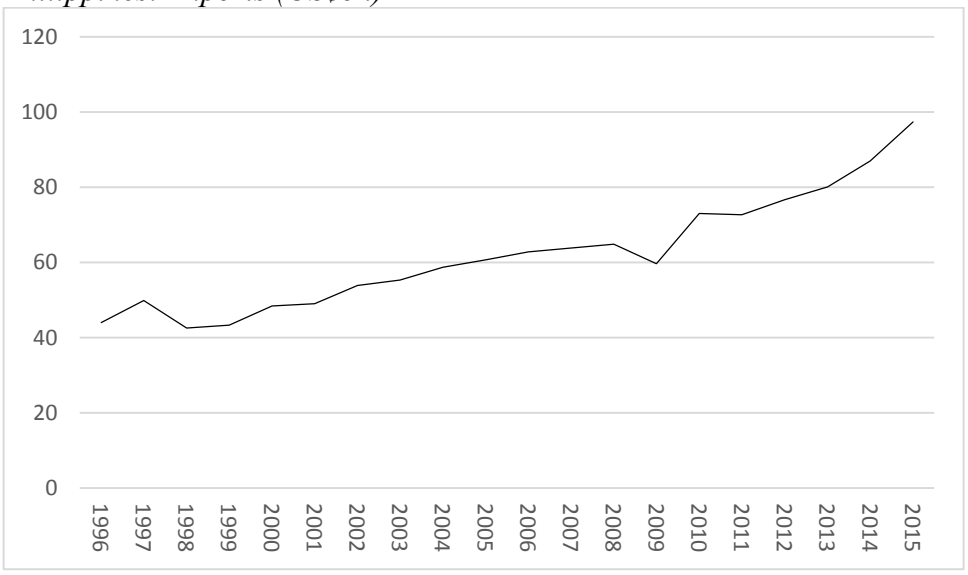
Source: Author

Figure B-3D
Philippines: Exports (US$bn)



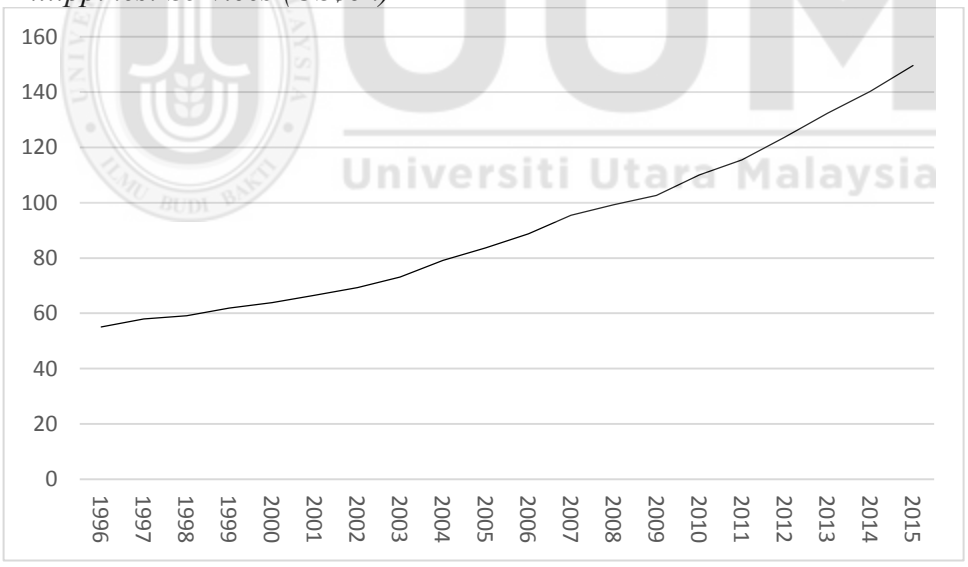
Source: Author

Figure B-3E
Philippines: Imports (US$bn)



Source: Author

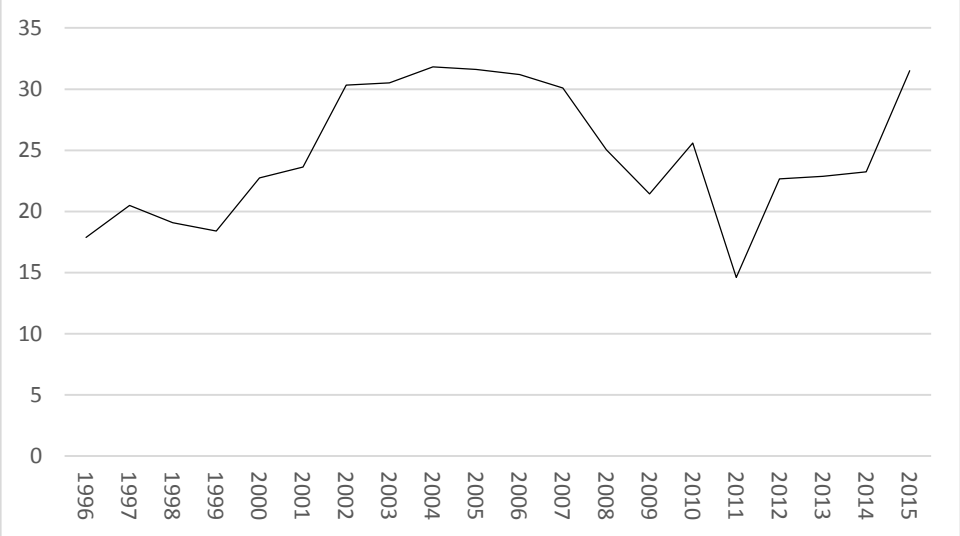
Figure B-3F
Philippines: Services (US$bn)



Source: Author

Figure B-3G

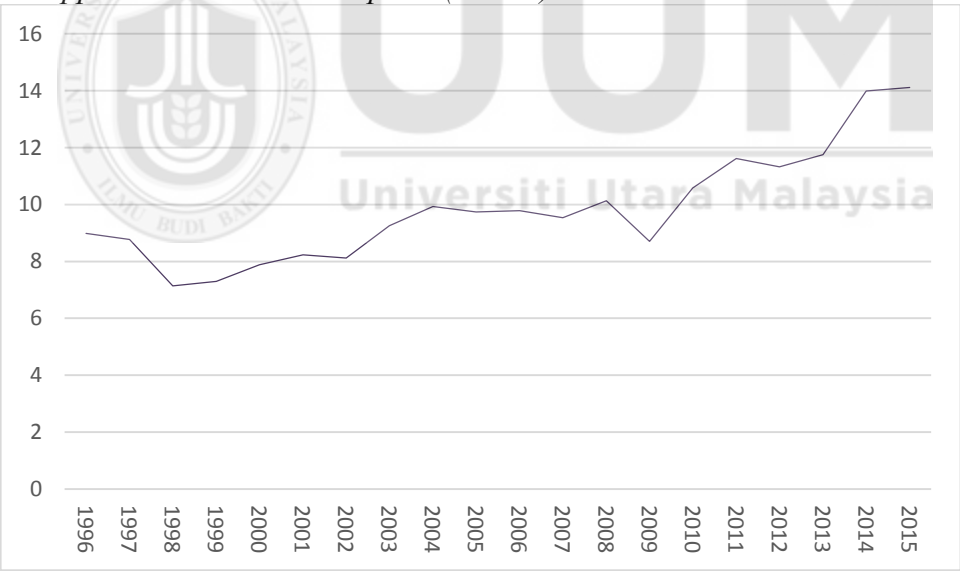
Philippines: Capital Imports (US$bn)



Source: Author

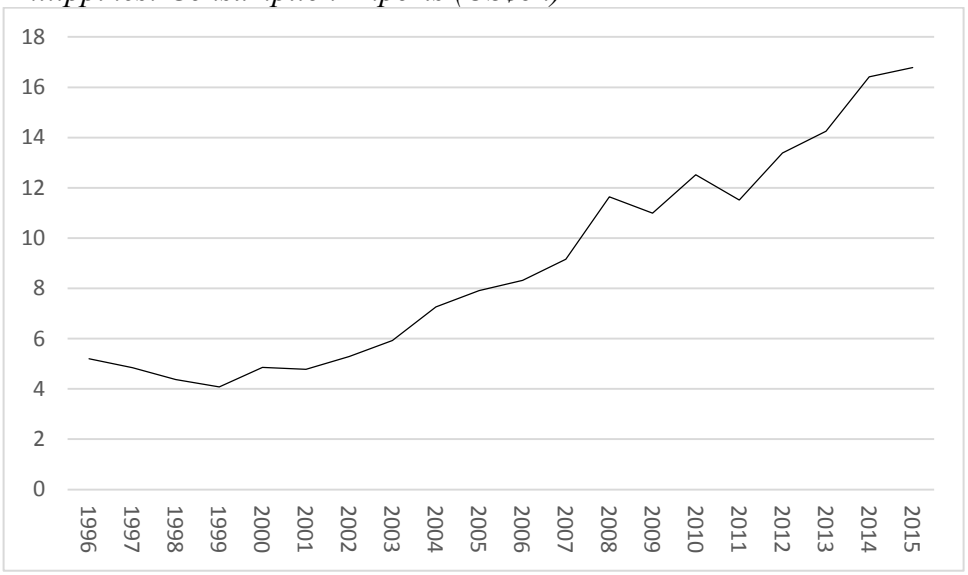
Figure B-3H

Philippines: Intermediate Imports (US$bn)



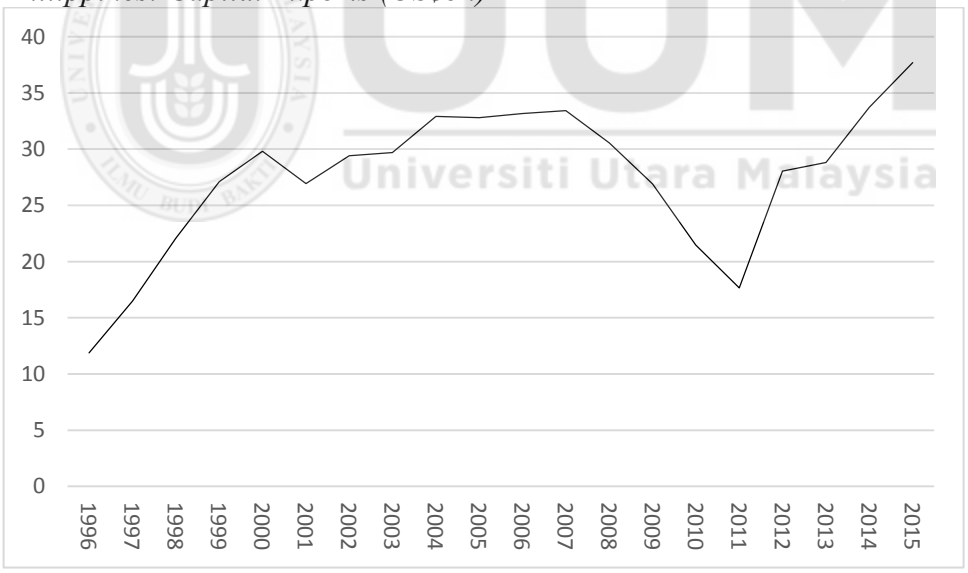
Source: Author

Figure B-3I
Philippines: Consumption Imports (US$bn)



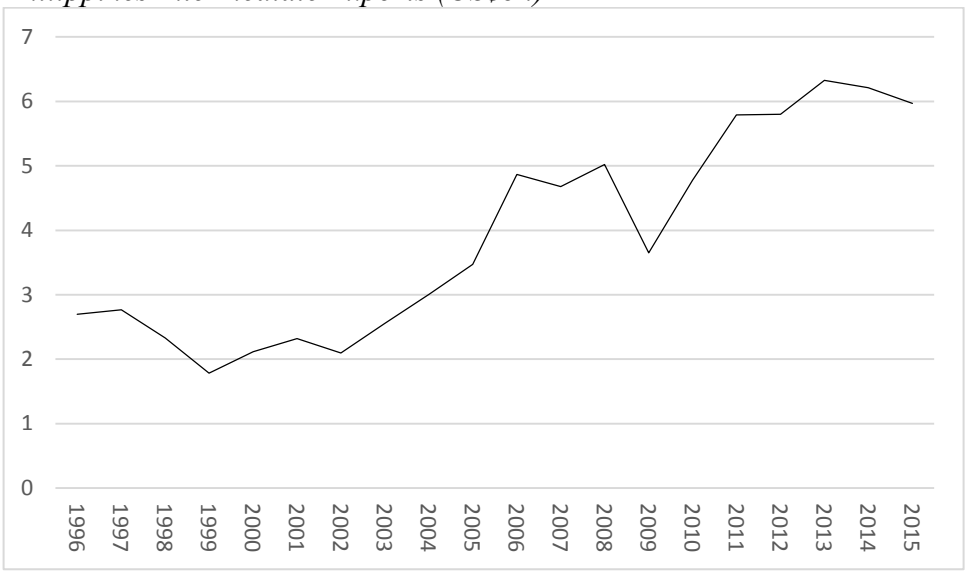
Source: Author

Figure B-3J
Philippines: Capital Exports (US$bn)



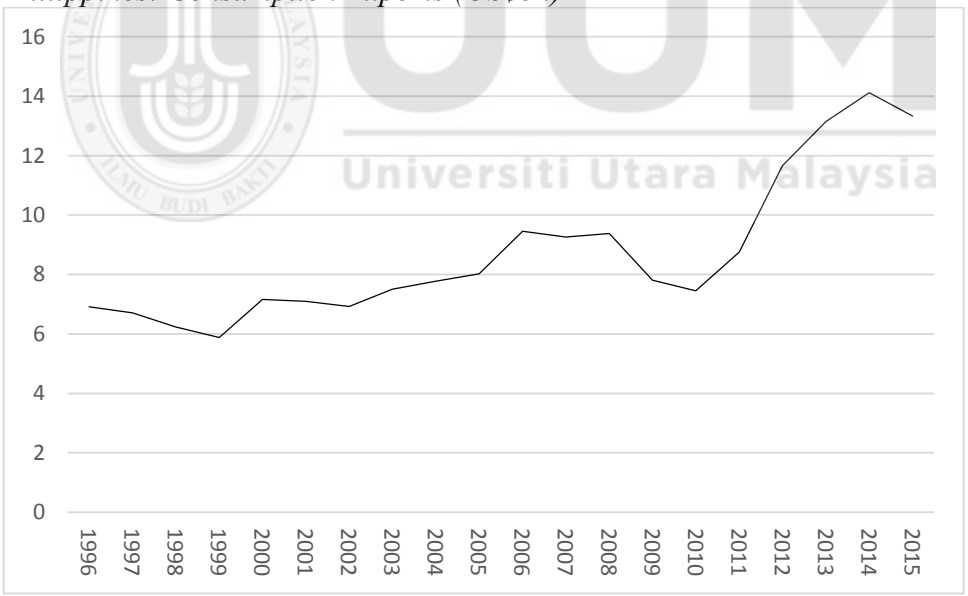
Source: Author

Figure B-3K
Philippines Intermediate Exports (US$bn)



Source: Author

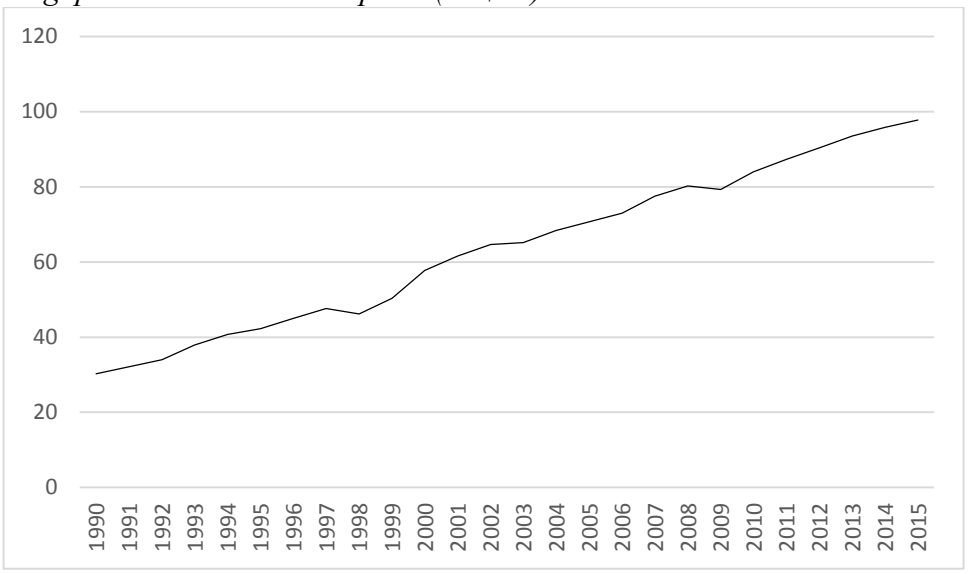
Figure B-3L
Philippines: Consumption Exports (US$bn)



Source: Author

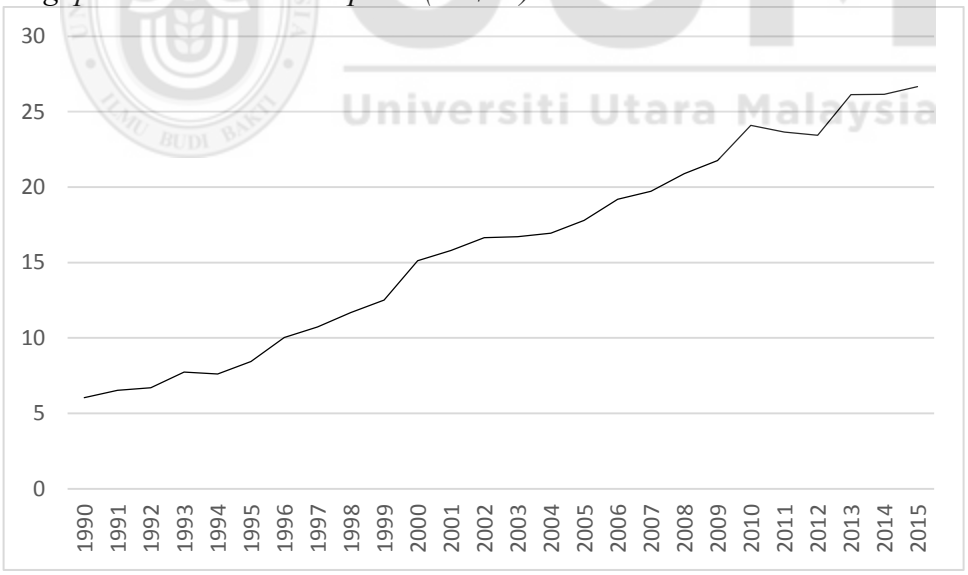
Appendix C-4

Figure B-4A
Singapore: Private Consumption (US$bn)



Source: Author

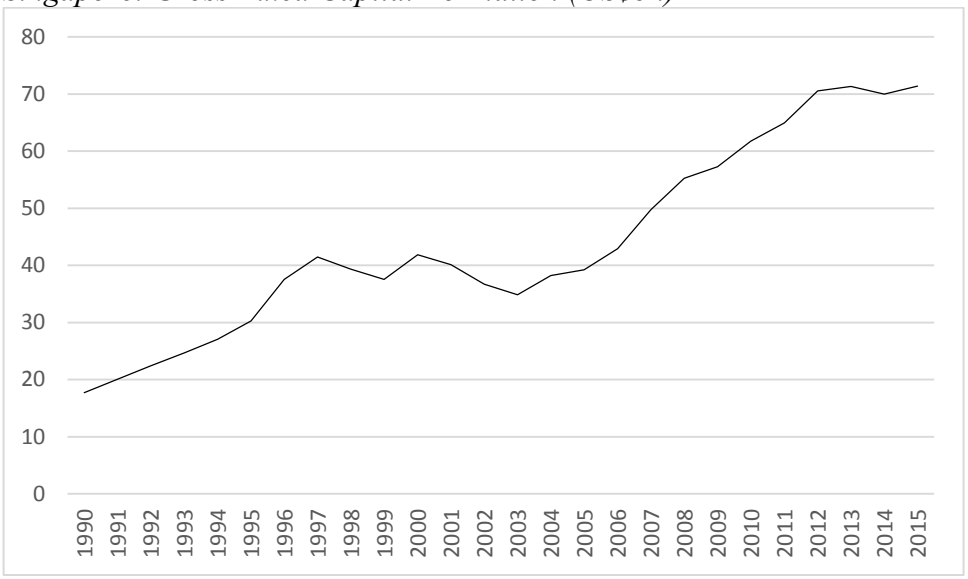
Figure B-4B
Singapore: Public Consumption (US$bn)



Source: Author

Figure B-4C

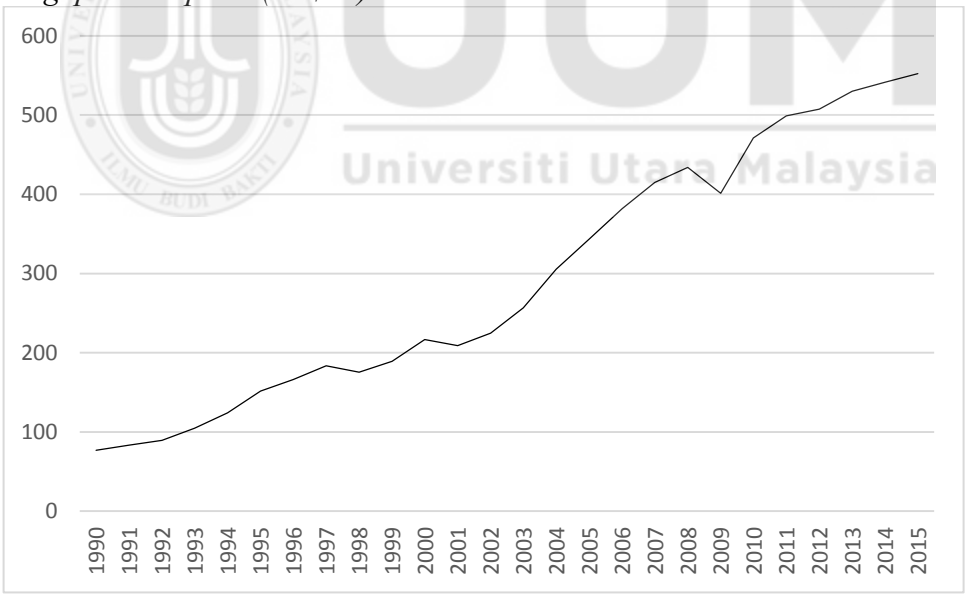
Singapore: Gross Fixed Capital Formation (US$bn)



Source: Author

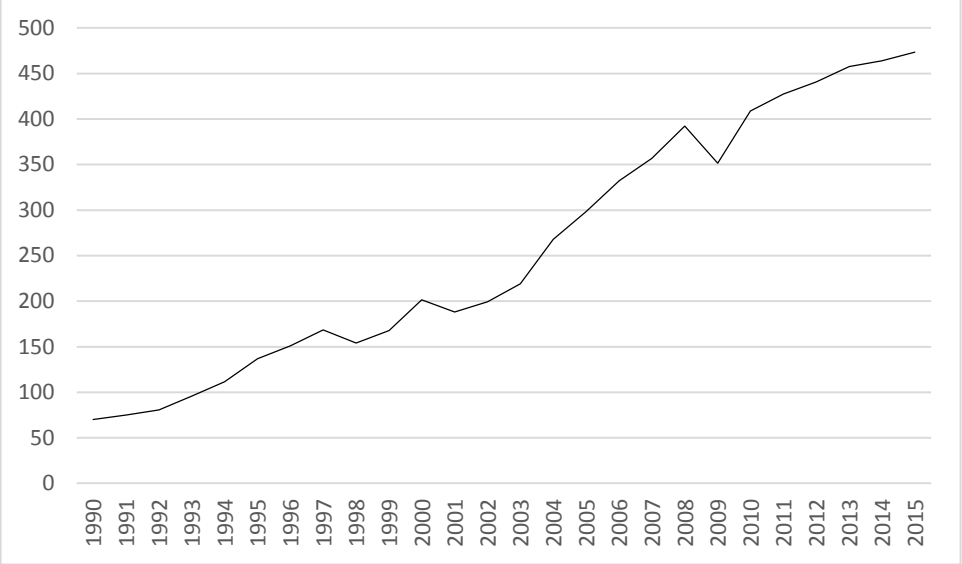
Figure B-4D

Singapore: Exports (US$bn)



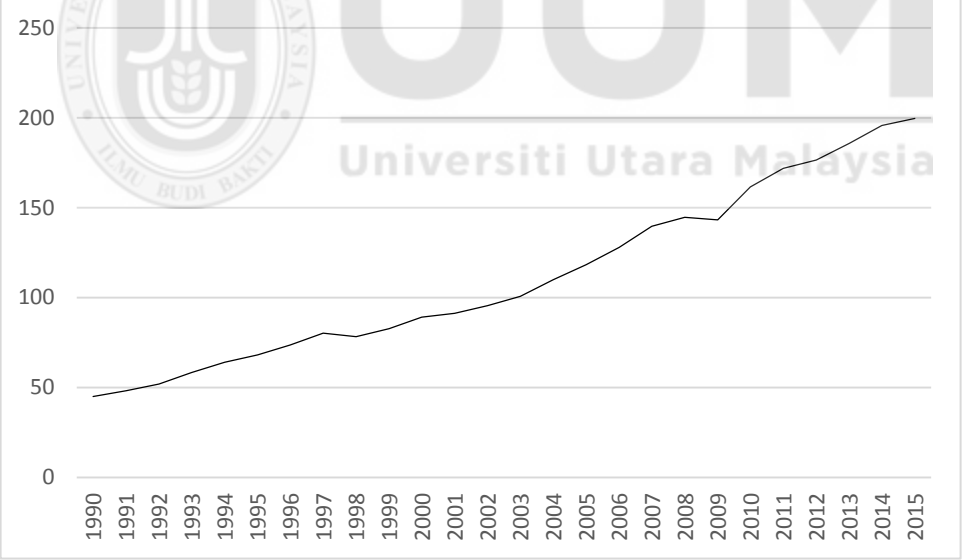
Source: Author

Figure B-4E
Singapore: Imports (US$bn)



Source: Author

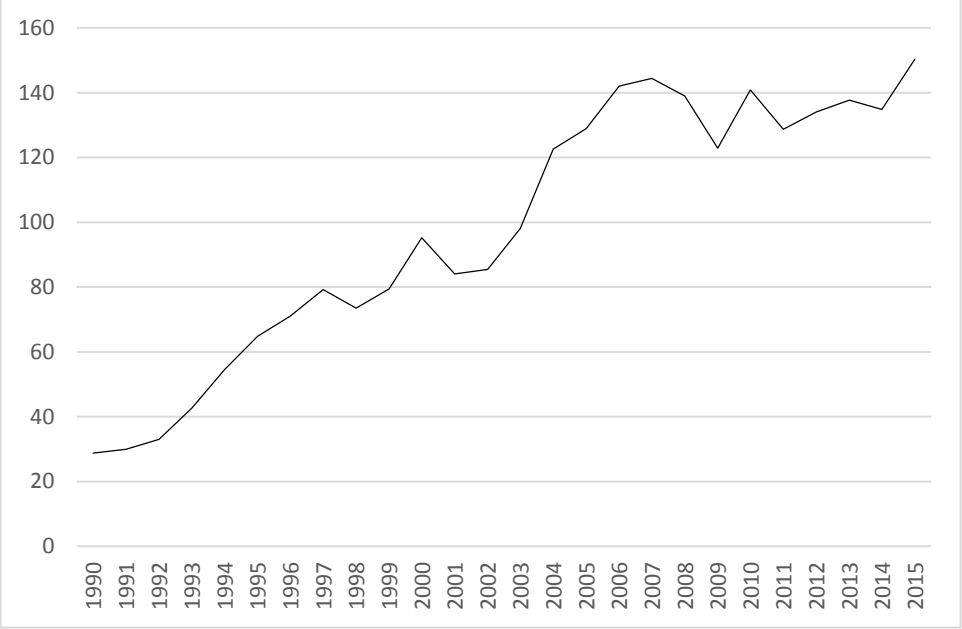
Figure B-4F
Singapore: Services (US$bn)



Source: Author

Figure B-4G

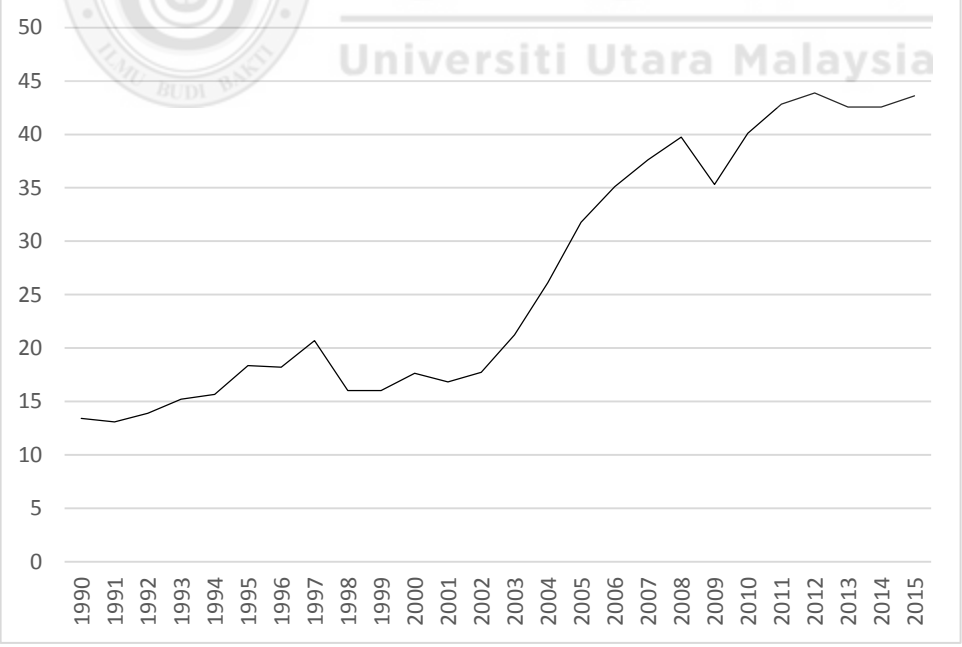
Singapore: Capital Imports (US$bn)



Source: Author

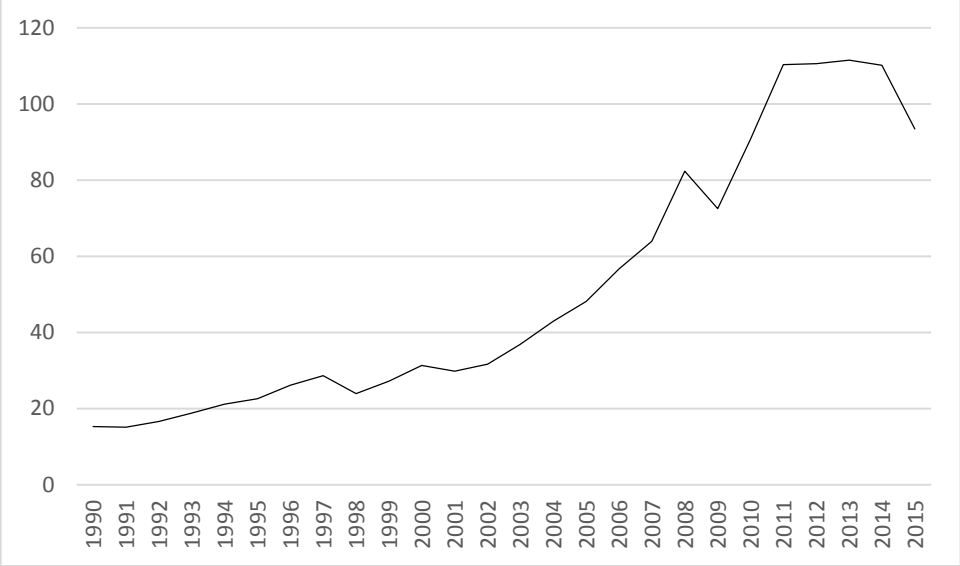
Figure B-4H

Singapore: Intermediate Imports (US$bn)



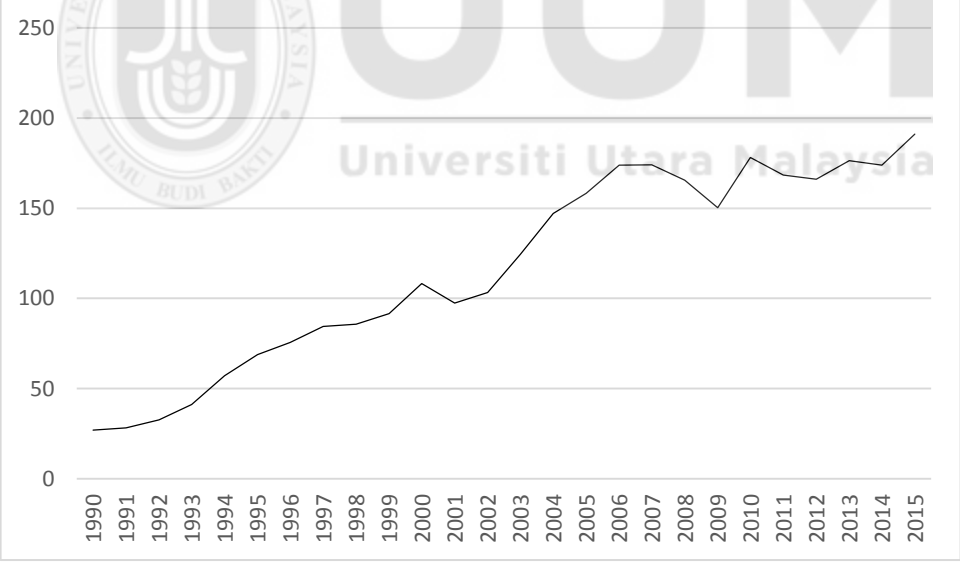
Source: Author

Figure B-4I
Singapore: Consumption Imports (US$bn)



Source: Author

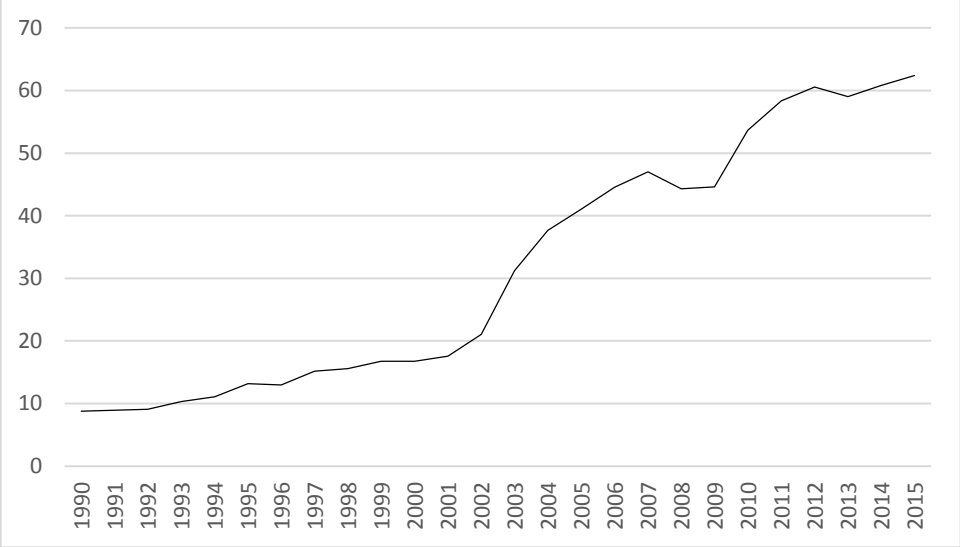
Figure B-4J
Singapore: Capital Exports (US$bn)



Source: Author

Figure B-4K

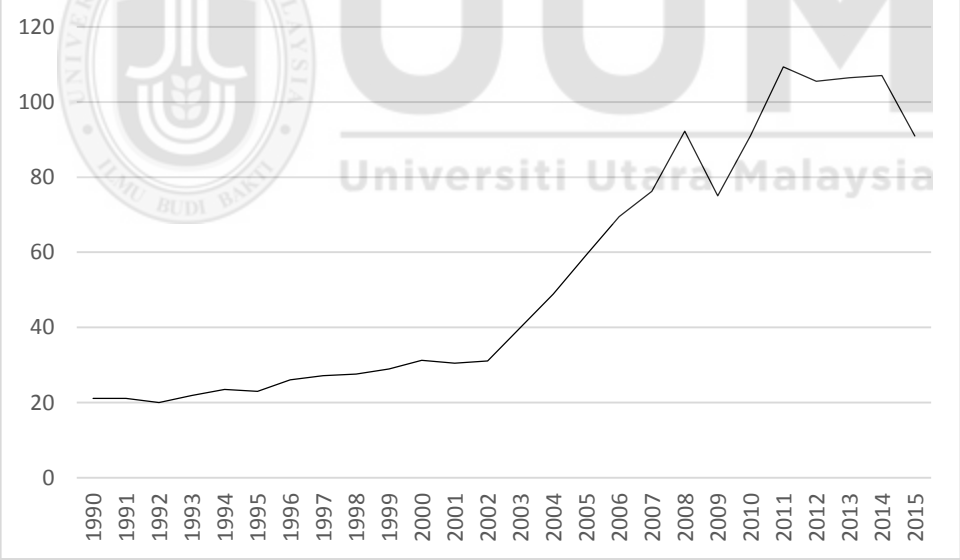
Singapore: Intermediate Exports (US$bn)



Source: Author

Figure B-4L

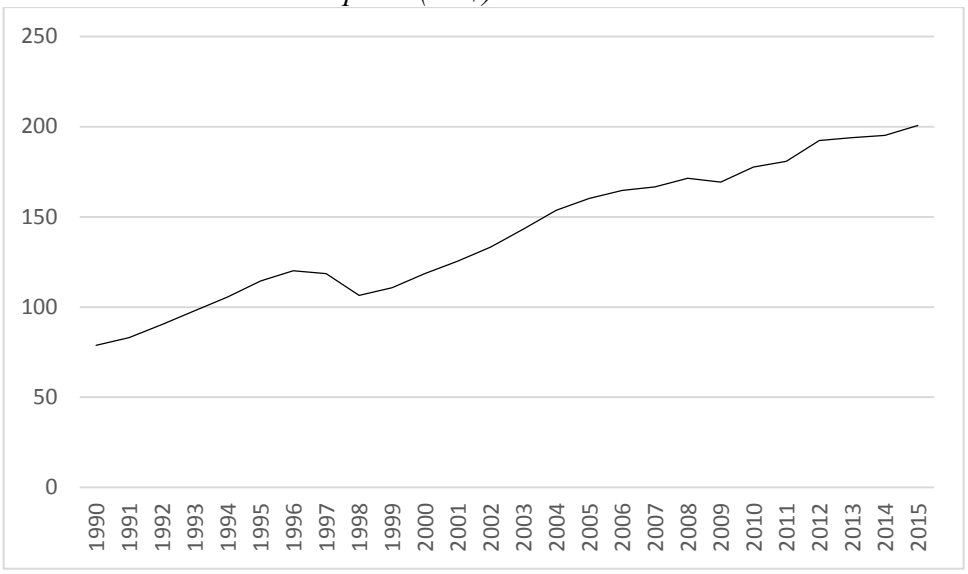
Singapore: Consumption Exports (US$bn)



Source: Author

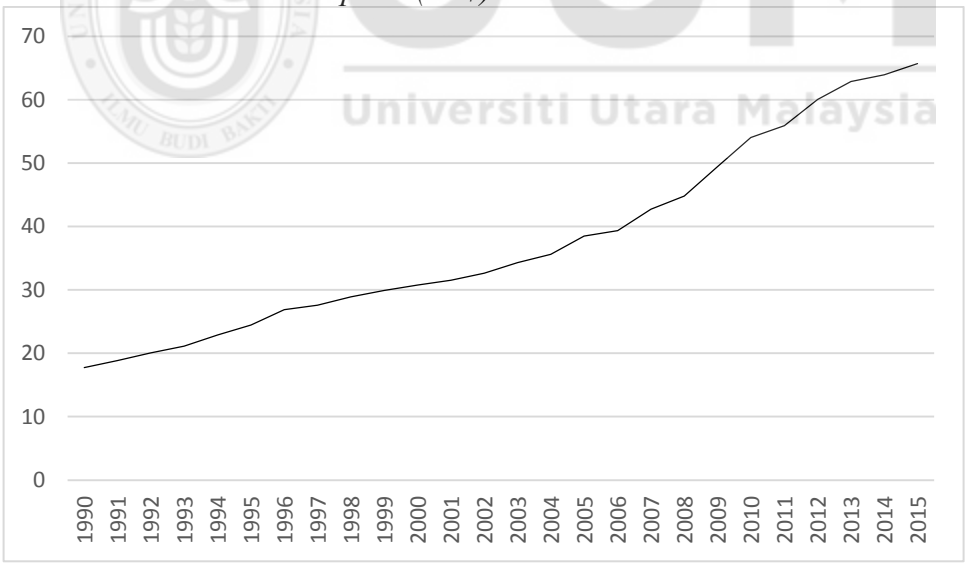
Appendix C-5

Figure B-5A
Thailand: Private Consumption (US$)



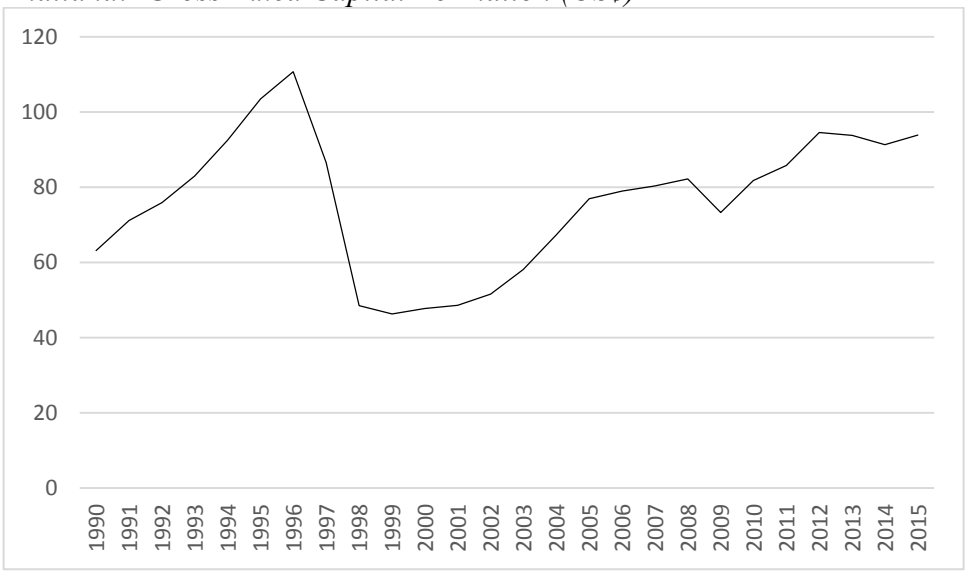
Source: Author

Figure B-5B
Thailand: Public Consumption (US$)



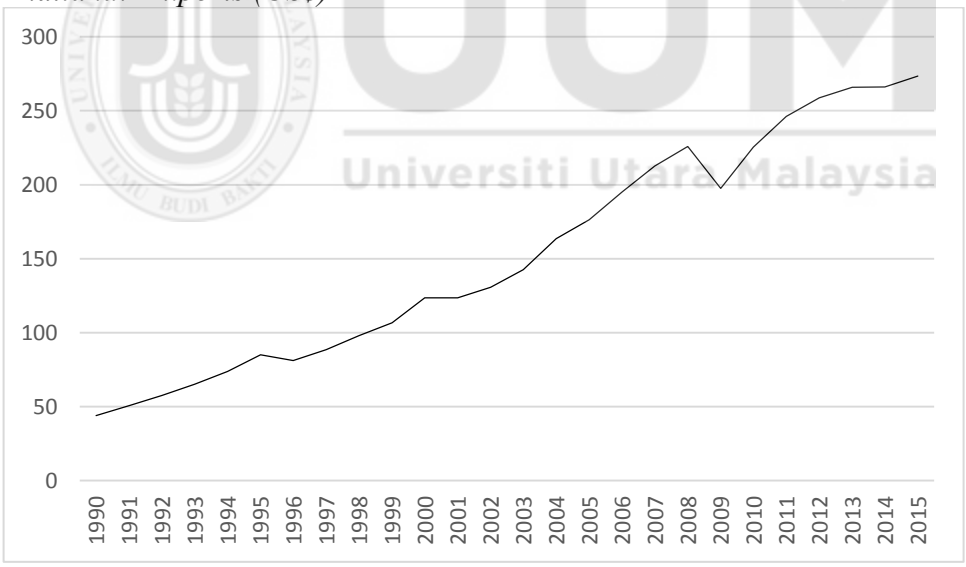
Source: Author

Figure B-5C
Thailand: Gross Fixed Capital Formation (US$)



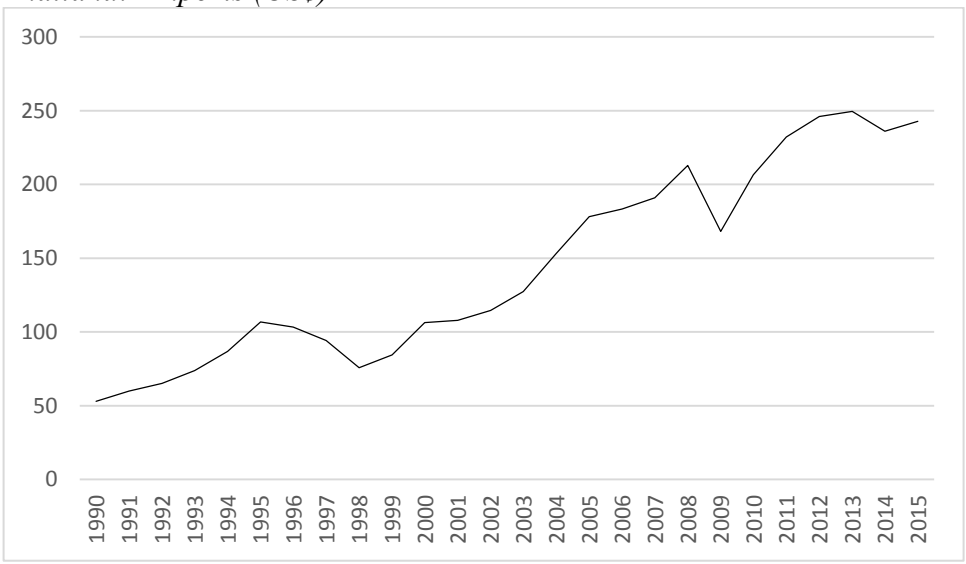
Source: Author

Figure B-5D
Thailand: Exports (US$)



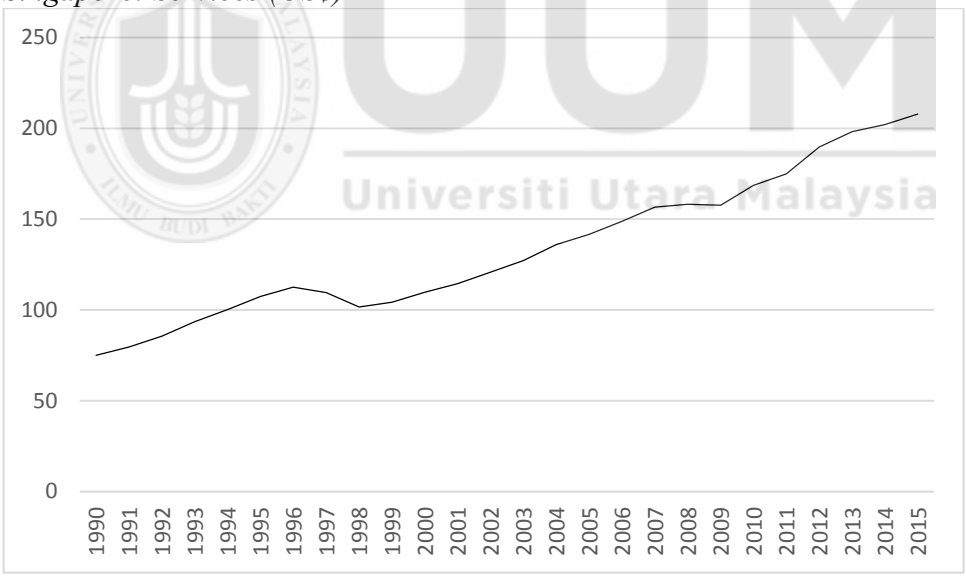
Source: Author

Figure B-5E
Thailand: Imports (US$)



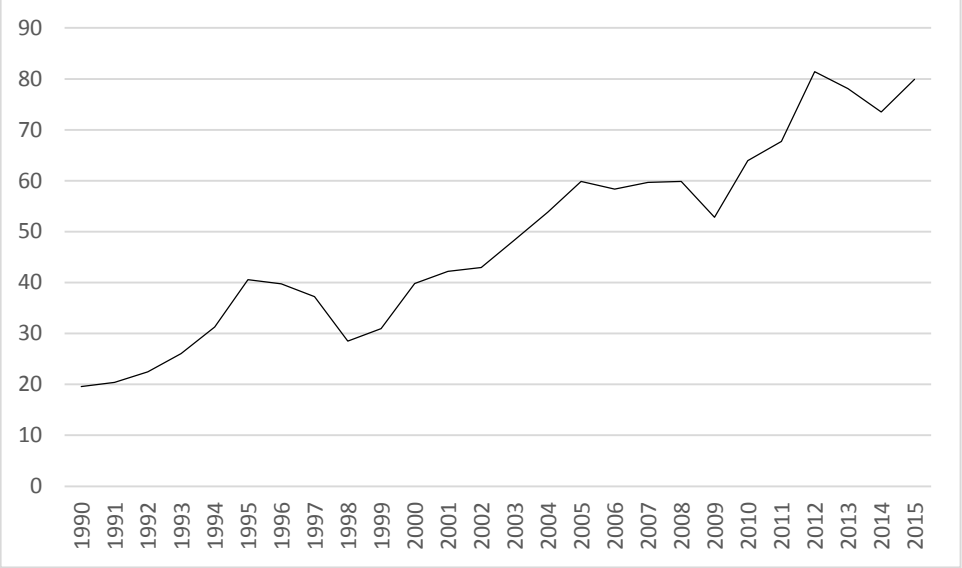
Source: Author

Figure B-5F
Singapore: Services (US$)



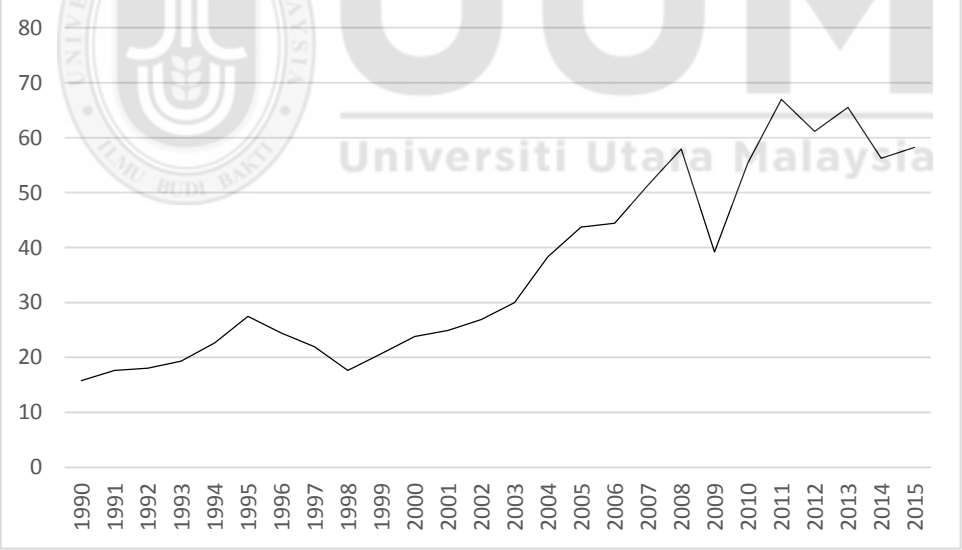
Source: Author

Figure B-5G
Singapore: Capital Imports (US$)



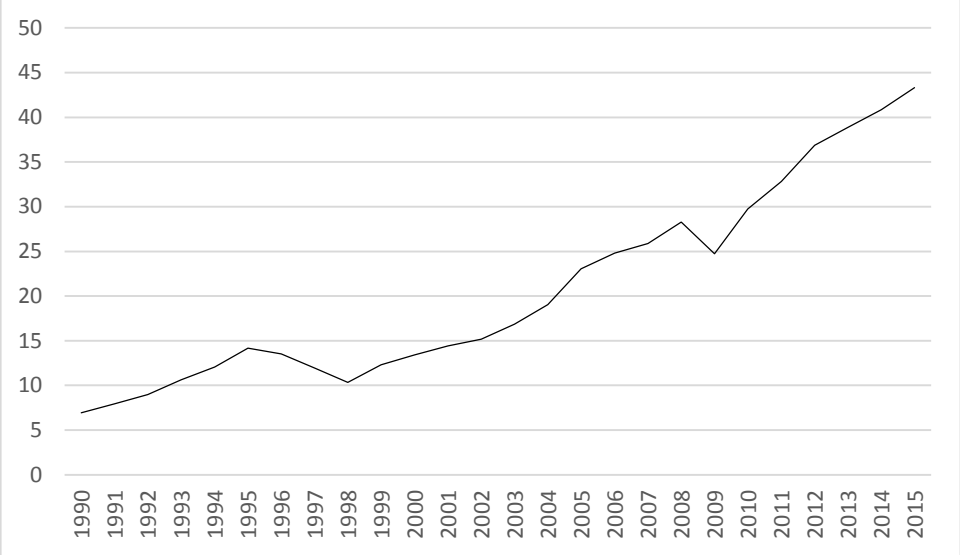
Source: Author

Figure B-5H
Thailand: Intermediate Imports (US$)



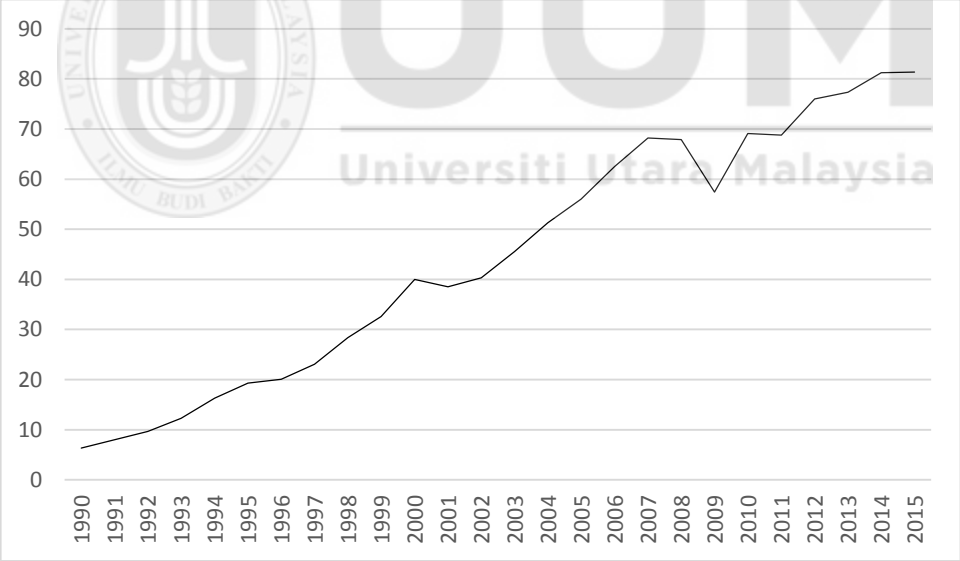
Source: Author

Figure B-5I
Thailand: Consumption Imports (US$)



Source: Author

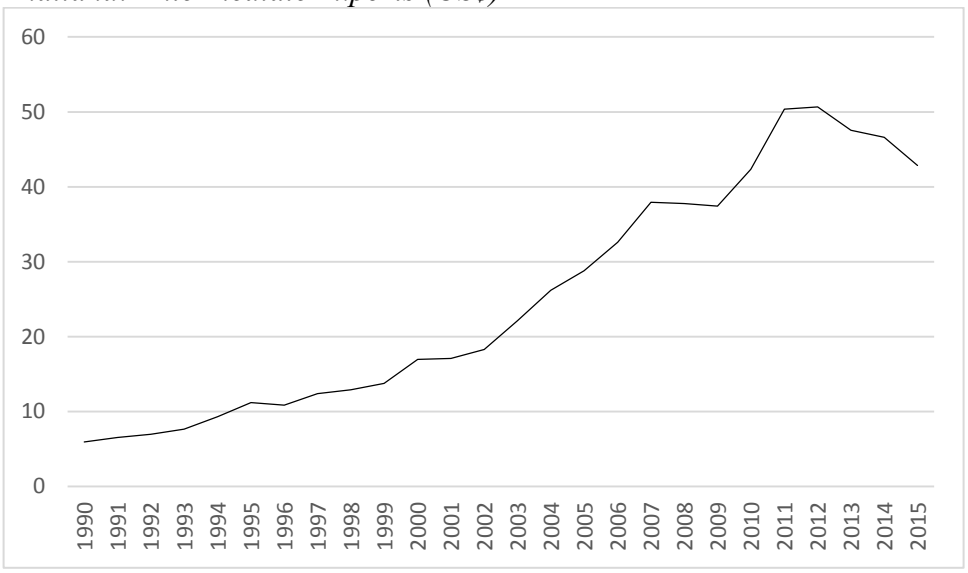
Figure B-5J
Thailand: Capital Exports (US$)



Source: Author

Figure B-5K

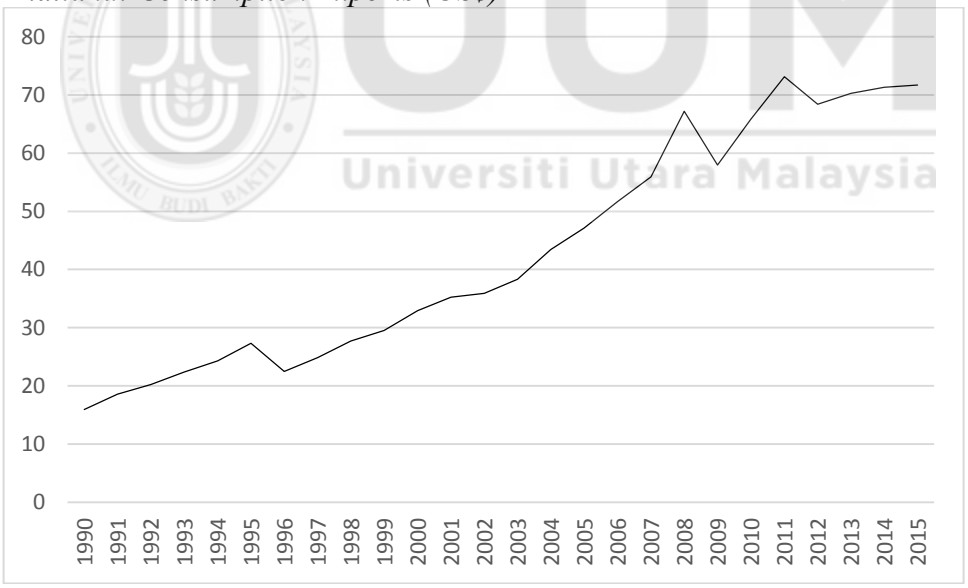
Thailand: Intermediate Exports (US$)



Source: Author

Figure B-5L

Thailand: Consumption Exports (US$)



Source: Author